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MICHIGAN STATISTICAL ABSTRACT

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David I. Verway
Editor

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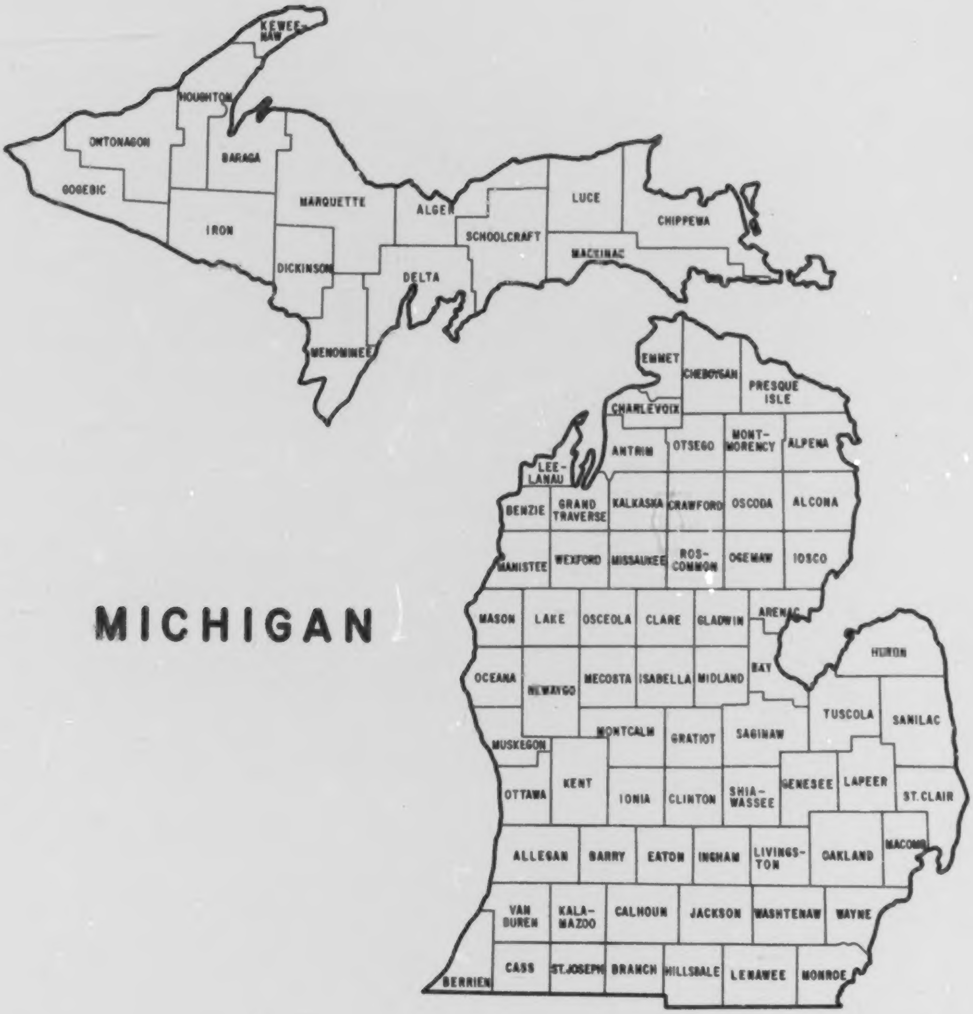
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PREFACE

Gail Guip, secretary at the Bureau of Business Research managed the production of this edition. Her contribution is gratefully acknowledged. She also typed the tables and Revathi Balasubramanian typed the narrative. Data were collected by Robert Fish, Revathi Balasubramanian, Mona Chatterji, Gail Guip and me. We all proofread.

A host of individuals in government and private organizations contributed time and material. The Bureau of Economic Analysis, Washington D.C., is the source on income data that appear in several chapters other than Chapter VI. The Office of Economic Development in Michigan's Department of Commerce arranged for the production of camera ready copy from BEA tapes. The office of Systems and Computer Services actually prepared those tables. The Michigan Metropolitan Information Center at Wayne State University's Center for Urban Studies prepared several of the tables that appear in Chapters I, II, V and VI. The Michigan Employment Employment Commission's Research and Statistics Division in Detroit was most helpful in securing many of the statistics that appear in Chapter V. The Office of Vital and Health Statistics, Michigan Department of Public Health, prepared much of the material for Chapter III. The Geological Survey Division, Michigan Department of Natural Resources prepared updated material for Chapter XIII. The Michigan Department of Transportation prepared tables for Chapter XVII. Other cooperating state agencies include the following departments: Management and Budget, Mental Health, Social Services, Education, States, Treasury, State Police, Licensing Regulation, and Commerce, and Agriculture.

Those who find this *Abstract* useful are advised to consult the *Economic Report of the Governor*, which also appears annually. It offers a good description of the state's economy as well as the most recent economic forecast. The Senate Fiscal Agency also publishes documents relating to the fiscal and economic conditions of our state.

At the University of Michigan each November, since 1952, the Department of Economics has sponsored the Annual Conference on the Economic Outlook. The data base which supports their national and Michigan forecast is substantial, and in a computer format. The Institute of Labor and Industrial Relations forecasts regional economics. A book by Harold T. Shapiro and George Fulton, *A Regional Econometric Forecasting System: Major Economic Areas in Michigan*, will be available from The University of Michigan Press this fall.

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I. POPULATION

Apportionment of the U.S. House of Representatives is on the basis of population; hence, the constitutional mandate to conduct a census of the nation's inhabitants every ten years. Despite efforts on the part of organizations inside and outside of government, some people do not get counted. Individuals are missed in the decennial censuses because they have no regular domicile where they can be reached, fail to report the fact of their existence to authorities, or deliberately conceal their existence for one reason or another. Published Census of Population statistics for states, counties, cities, villages, and other places represent the number of people that could be accounted for on census day, plus those that were found subsequently in "Were you counted?" campaigns.

The U.S. Bureau of the Census, the agency directly responsible for counting inhabitants in this country, uses the opportunity to collect a multitude of other information as well. Statistics on sex, race, age, and household relationship are derived from answers to relevant questions on census forms sent to every household; that is, the same forms used for the population count itself.

Census day has been set on April 1 since 1930. In 1920 it was January 1 and in 1910 it was April 15. Between 1830 and 1900, census day was June 1. For 1820, the first such tabulation from which data have been selected for reproduction in this abstract, census day was August 7.

Urban and Rural were redefined in 1950. According to the current definition, the urban population comprises all persons living in (1) places of 2,500 inhabitants or more incorporated as cities, boroughs, or villages; (2) the densely populated, settled urban fringe, including both incorporated and unincorporated places, around cities of 50,000 or more; and (3) unincorporated places of 2,500 or more outside any urban fringe. According to the definition used prior to 1950, the urban population was limited to persons living in incorporated places or 2,500 inhabitants or more and in other areas classified as urban under special rules relating to population size and density. The rural population is that remaining of the total, after the above definition is applied.

The Census Bureau also estimates the population of states for intercensal years. These estimates, reproduced in Table I-2, are based upon formulae that incorporated data on known births and deaths, school enrollments, automobile registration, and other factors thought to reflect population. Other techniques are used to produce estimates of net population flows, that is, net migration statistics shown in Table I-4.

Intercensal estimates of the population of Michigan counties for July 1, 1971 are in preparation by the Bureau of Programs and Budget of the State

Executive Office and the Michigan Department of Public Health. These state agencies have worked closely with the U.S. Bureau of the Census in developing a technique for allocating the estimated state population totals among counties. The Bureau of the Census provides the July 1 population estimates for each state.

Another source of interim population estimates is the Bureau of Economic Analysis of the U.S. Department of Commerce. That agency is responsible for calculating personal and per capita personal income for states and counties. Consequently, a part of its program involves making population estimates. These may differ somewhat from the ones supplied by the state's Budget Bureau because of different data employed and variations in techniques.

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TABLE 1-1. TOTAL URBAN AND RURAL POPULATION OF MICHIGAN AND THE UNITED STATES: CENSUS 1820-1980

Year	Urban		Rural		Total	
	Michigan	United States	Michigan	United States	Michigan	United States
	Previous urban definition					
1820	0	693,255	8,896	8,945,198	8,896	9,638,453
1830	0	1,127,247	31,639	11,738,773	31,639	12,866,020
1840	9,102	1,845,055	203,165	15,224,398	212,267	17,069,453
1850	29,025	3,543,716	368,629	19,648,160	397,654	23,191,876
1860	99,701	6,216,518	649,412	25,226,803	749,113	31,443,321
1870	237,985	9,902,361	946,074	28,656,010	1,184,059	38,558,371
1880	405,412	14,129,735	1,231,525	36,059,474	1,636,937	50,189,209
1890	730,294	22,106,265	1,363,596	40,873,501	2,093,890	62,979,766
1900	952,323	30,214,832	1,468,659	45,997,336	2,420,982	76,212,168
1910	1,327,044	42,064,001	1,483,129	50,164,495	2,810,173	92,228,496
1920	2,241,560	54,253,282	1,426,852	51,768,255	3,668,412	106,021,537
1930	3,302,075	69,160,599	1,540,250	54,042,025	4,842,325	123,202,624
1940	3,454,867	74,705,338	1,801,239	57,459,231	5,256,106	132,164,569
1950	4,166,165	90,128,194	2,205,601	61,197,604	6,371,766	151,325,798
1960	5,085,882	113,056,353	2,737,312	66,266,822	7,823,194	179,323,175
	Current urban definition					
1950	4,503,084	96,846,817	1,868,682	54,478,981	6,371,766	151,325,798
1960	5,739,132	125,268,750	2,084,062	54,054,425	7,823,194	179,323,175
1970	6,566,483	149,324,930	2,308,600	53,886,996	8,881,826	203,211,926
1980	6,551,551	166,965,380	2,710,527	59,539,445	9,262,078	226,504,825

SOURCE: Bureau of the Census, *U.S. Census of Population: 1970, Number of Inhabitants, Michigan* (Washington, D.C.: 1982), PC80-1-A24: and special release.

TABLE I-2. CENSAL AND INTERCENSAL ESTIMATES OF THE TOTAL RESIDENT AND CIVILIAN POPULATION OF MICHIGAN AND THE UNITED STATES: 1 JULY 1955-1983

(In thousands)

Year	Civilian population		Total population[a]	
	Michigan	United States	Michigan	United States
1955	7,270	162,967	7,285	165,069
1956	7,452	166,055	7,465	168,088
1957	7,554	169,110	7,569	171,187
1958	7,652	172,226	7,667	174,149
1959	7,750	175,277	7,767	177,135
1960	7,818	178,136	7,834	179,975
1961	7,871	181,123	7,893	182,973
1962	7,909	183,644	7,933	185,738
1963	8,034	186,448	8,058	188,438
1964	8,164	189,085	8,187	191,085
1965	8,336	191,539	8,357	193,460
1966	8,492	193,345	8,512	195,501
1967	8,610	195,181	8,630	197,374
1968	8,677	197,026	8,696	199,312
1969	8,765	199,067	8,781	201,306
1970	8,880	201,985	8,901	203,805
1971	8,957	204,866	8,972	206,827
1972	9,011	207,511	9,025	209,284
1973	9,058	209,600	9,072	211,357
1974	9,098	211,636	9,109	213,342
1975	9,095	213,788	9,108	215,465
1976	9,105	215,894	9,177	217,563
1977	9,147	218,106	9,157	219,760
1978	9,194	220,467	9,202	222,095
1979	9,242	222,969	9,249	224,567
1980	9,251	225,552	9,262	226,505
1981	9,260	227,656	9,265	229,304
1982	9,105	230,116	9,208	231,479
1983	9,058	232,286	9,155	233,722

SOURCE: Bureau of the Census, Current Population Reports, Series P-25, no.304 (Washington, D.C.: 1965); no. 460 (1971); no. 468 (1971); no. 908 (1981), special release; and Michigan Department of Management and Budget, special release.

a. Figures exclude members of the armed forces stationed abroad.

TABLE I-3. POPULATION OF MICHIGAN COUNTIES: CENSUS 1930, 1940, 1950, 1960, 1970, 1980; AND 1 JULY 1983 ESTIMATES

County	1930	1940	1950	1960	1970	1980	Preliminary[a] July 1, 1983 Estimates
Alcona	4,989	5,463	5,856	6,352	7,113	9,740	9,969
Alger	9,327	10,167	10,007	9,250	8,568	9,225	8,683
Allegan	38,974	41,839	47,493	57,729	66,575	81,555	82,581
Alpena	18,574	20,766	22,189	28,556	30,708	32,315	31,633
Antrim	9,979	10,964	10,721	10,373	12,612	16,194	16,678
Arenac	8,007	9,233	9,644	9,860	11,149	14,706	15,174
Baraga	9,168	9,356	8,037	7,151	7,789	8,484	8,446
Barry	20,928	22,613	26,183	31,738	38,166	45,781	45,881
Bay	69,474	74,981	88,461	107,042	117,339	119,881	117,444
Benzie	6,587	7,800	8,306	7,834	8,593	11,205	11,029
Berrien	81,066	89,117	115,702	149,865	163,940	171,276	165,741
Branch	23,950	25,845	30,202	34,903	37,906	40,188	39,057
Calhoun	87,043	94,206	120,813	138,858	141,963	141,557	139,965
Cass	20,888	21,910	28,185	36,932	43,312	49,499	47,102
Charlevoix	11,981	13,031	13,475	13,421	16,541	19,907	19,822
Cheboygan	11,502	13,644	13,731	14,550	16,573	20.649	21,190
Chippewa	25,047	27,807	29,206	32,655	32,412	29,029	29,071
Clare	7,032	9,163	10,253	11,647	16,695	23,822	24,426
Clinton	24,174	26,671	31,195	37,969	48,492	55,893	54,844
Crawford	3,097	3,765	4,151	4,971	6,482	9,465	9,775
Delta	32,280	34,037	32,913	34,298	35,924	38,947	39,565
Dickinson	29,941	28,731	24,844	23,917	23,753	25,341	25,385
Eaton	31,728	34,124	40,023	49,684	68,892	88,337	88,054
Emmet	15,109	15,791	16,534	15,904	18,331	22,992	23,770
Genesee	211,641	227,944	270,963	374,313	445,589	450,449	443,681

TABLE I-3. POPULATION OF MICHIGAN COUNTIES: CENSUS 1930, 1940, 1950, 1960, 1970, 1980; AND 1 JULY 1983 ESTIMATES (cont.)

County	1930	1940	1950	1960	1970	1980	Preliminary[a] July 1, 1983 Estimates
Gladwin	7,424	9,385	9,451	10,769	13,471	19,957	21,117
Gogebic	31,577	31,797	27,053	24,370	20,676	19,686	19,549
Grand Traverse	20,011	23,390	28,598	33,490	39,175	54,899	56,663
Gratiot	30,252	32,205	33,429	37,012	39,246	40,448	39,909
Hillsdale	27,417	29,092	31,916	34,742	37,171	42,071	41,723
Houghton	52,851	47,631	39,771	35,654	34,652	37,872	38,790
Huron	31,132	32,584	33,149	34,006	34,083	36,459	35,707
Ingham	116,587	130,616	172,941	211,296	261,039	275,520	275,341
Ionia	35,093	35,710	38,158	43,132	45,848	51,815	52,321
Iosco	7,517	8,560	10,906	16,505	24,905	28,349	30,633
Iron	20,805	20,243	17,692	17,184	13,813	13,635	13,588
Isabella	21,126	25,982	28,964	35,348	44,594	54,110	54,789
Jackson	92,304	93,108	107,925	131,994	143,274	151,495	148,003
Kalamazoo	91,368	100,085	126,707	169,712	201,550	212,378	217,630
Kalkaska	3,799	5,159	4,597	4,382	5,372	10,952	11,341
Kent	240,511	246,338	288,292	363,187	411,044	444,506	460,394
Keweenaw	5,076	4,004	2,918	2,417	2,264	1,963	2,001
Lake	4,066	4,798	5,257	5,338	5,661	7,711	8,526
Lapeer	28,348	32,116	35,794	41,926	52,361	70,038	68,664
Leelanau	8,206	8,436	8,647	9,321	10,872	14,007	14,240
Lenawee	49,849	53,110	64,629	77,789	81,951	89,948	88,138
Livingston	19,274	20,863	26,725	38,233	58,967	100,289	97,178
Luce	6,528	7,423	8,147	7,827	6,789	6,659	6,014
Mackinac	8,783	9,438	9,287	10,853	9,660	10,178	10,041
Macomb	77,146	107,638	184,961	405,804	625,309	694,600	687,583

TABLE I-3. POPULATION OF MICHIGAN COUNTIES: CENSUS 1930, 1940, 1950, 1960, 1970, 1980; AND 1 JULY 1983 ESTIMATES (cont.)

County	1930	1940	1950	1960	1970	1980	Preliminary[a] July 1, 1983 Estimates
Manistee	17,409	18,450	18,524	19,042	20,393	23,019	22,211
Marquette	44,076	47,144	47,654	56,154	64,686	74,101	72,694
Mason	18,756	19,378	20,474	21,929	22,612	26,365	26,369
Mecosta	15,738	16,902	18,968	21,051	27,992	36,961	36,665
Menominee	23,652	24,883	25,299	24,685	24,587	26,201	25,519
Midland	19,150	27,094	35,662	51,450	63,769	73,578	74,274
Missaukee	6,992	8,034	7,458	6,784	7,126	10,009	10,299
Monroe	52,485	58,620	75,666	101,120	119,215	134,659	128,666
Montcalm	27,471	28,581	31,013	35,795	39,660	47,555	49,348
Montmorency	2,814	3,840	4,125	4,424	5,247	7,492	7,886
Muskegon	84,630	94,501	121,545	149,943	157,426	157,589	156,380
Newaygo	17,029	19,286	21,567	24,160	27,992	34,917	35,862
Oakland	211,251	254,068	396,001	690,259	907,871	1,011,793	1,006,273
Oceana	13,805	14,812	16,105	16,547	17,984	22,002	21,588
Ogemaw	6,595	8,720	9,345	9,680	11,903	16,436	16,481
Ontonagon	11,114	11,359	10,282	10,584	10,548	9,861	10,000
Osceola	12,806	13,309	13,797	13,595	14,838	18,928	19,677
Oscoda	1,728	2,543	3,134	3,447	4,726	6,858	6,792
Otsego	5,554	5,827	6,435	7,545	10,422	14,993	15,283
Ottawa	54,858	59,660	73,751	98,719	128,181	157,174	161,007
Presque Isle	11,330	12,250	11,996	13,117	12,836	14,267	13,982
Roscommon	2,055	3,668	5,916	7,200	9,892	16,374	17,771
Saginaw	120,717	130,468	153,515	190,752	219,743	228,059	220,831
St. Clair	67,563	76,222	91,599	107,201	120,175	138,802	138,102
St. Joseph	30,618	31,749	35,071	42,332	47,392	56,083	56,751

TABLE I-3. POPULATION OF MICHIGAN COUNTIES: CENSUS 1930, 1940, 1950, 1960, 1970, 1980; AND 1 JULY 1983 ESTIMATES (cont.)

County	1930	1940	1950	1960	1970	1980	Preliminary[a] July 1, 1983 Estimates
Sanilac	27,751	30,114	30,837	32,314	35,181	40,789	39,488
Schoolcraft	8,451	9,524	9,148	8,953	8,226	8,575	8,394
Shiawassee	39,517	41,207	45,967	53,446	63,075	71,140	68,651
Tuscola	32,934	35,694	38,258	43,305	48,603	56,961	55,092
Van Buren	32,637	35,111	39,184	48,395	56,173	66,814	67,077
Washtenaw	65,530	80,810	134,606	172,440	234,103	264,748	269,105
Wayne	1,888,946	2,015,623	2,435,235	2,666,297	2,670,368	2,337,891	2,252,102
Wexford	16,827	17,976	18,628	18,466	19,717	25,102	26,011
TOTAL	4,842,325	5,256,106	6,371,766	7,823,194	8,881,826	9,262,078	9,155,480

SOURCE: Bureau of the Census, *U.S. Census of Population: 1940, Number of Inhabitants, Michigan* (Washington, D.C.: 1941), Table 5, *U.S. Census of Population: 1950, Number of Inhabitants,* (Washington, D.C.: 1951), Table 5,; *U.S. Census of Population: 1960, Number of Inhabitants, Michigan* (Washington, D.C.: 1961), Table 6, and *U.S. Census of Population: 1970, Number of Inhabitants, Michigan* (Washington, D.C.: 1971), Table 9; and Bureau of the Census, *1980 Census of Population, Number of Inhabitants* (Washington, D.C.: 1982, Table 2; and Budget, Information System Division, special release; and Michigan Department of Management and Budget, special release.

a. The preliminary estimates are subject to change when more data become available.

TABLE I-4. COMPONENTS OF POPULATION CHANGE IN MICHIGAN, BY COUNTY: CENSUS 1970 TO CENSUS 1980 AND 1 JULY 1983 ESTIMATES

	1970 to 1980				1980 to Preliminary 1 July 1983 estimates[a]			
County	Population change	Births[b]	Deaths	Net migration	Population change	Births[b]	Deaths	Net migration
Alcona	2,627	1,026	1,146	2,747	229	344	395	280
Alger	657	1,322	1,033	368	-542	468	339	-671
Allegan	14,980	12,286	6,038	8,732	1,026	4,414	2,022	-1,366
Alpena	1,607	4,885	2,700	578	-682	1,576	907	-1,351
Antrim	3,582	2,268	1,647	2,961	484	786	576	274
Arenac	3,557	2,060	1,421	2,918	468	739	536	265
Baraga	695	1,323	1,004	376	-38	394	347	-85
Barry	7,615	6,409	3,589	4,795	100	2,245	1,127	-1,019
Bay	2,542	19,183	9,706	-6,935	-2,437	5,885	3,095	-5,227
Benzie	2,612	1,427	1,221	2,406	-176	565	393	-348
Berrien	7,336	29,338	15,414	6,588	-5,535	8,394	4,750	-9,179
Branch	2,282	6,021	3,784	45	-1,131	2,186	1,185	-2,132
Calhoun	-406	22,600	12,946	-10,060	-1,592	6,958	4,094	-4,456
Cass	6,187	7,137	4,058	3,108	-2,397	2,170	1,284	-3,283
Charlevoix	3,366	2,907	1,859	2,318	-85	1,105	626	-564
Cheboygan	4,076	3,052	2,004	3,028	541	1,103	695	133
Chippewa	-3,383	6,379	2,957	-6,805	42	1,307	940	-325
Clare	7,127	2,872	2,353	6,608	604	1,158	849	295
Clinton	7,401	8,185	3,229	2,445	-1,049	2,861	993	-2,917
Crawford	2,983	1,293	853	2,543	310	583	299	26
Delta	3,023	5,993	4,055	1,085	618	1,987	1,176	-194
Dickinson	1,588	3,305	3,066	1,349	44	1,219	958	-218
Eaton	19,445	11,307	5,065	13,203	-283	4,052	1,738	-2,597
Emmet	4,661	3,183	2,028	3,506	778	1,132	684	330
Genesee	4,860	78,036	32,681	-40,495	-6,768	23,738	10,747	-19,759

TABLE I-4. COMPONENTS OF POPULATION CHANGE IN MICHIGAN, BY COUNTY: CENSUS 1970 TO CENSUS 1980 AND 1 JULY 1983 ESTIMATES (cont.)

County	1970 to 1980				1980 to Preliminary 1 July 1983 estimates[a]			
	Population change	Births[b]	Deaths	Net migration	Population change	Births[b]	Deaths	Net migration
Gladwin	6,486	2,387	1,754	5,853	1,160	964	652	848
Gogebic	-990	2,513	3,041	-462	-137	761	941	43
Grand Traverse	15,724	7,440	3,910	12,194	1,764	2,996	1,444	212
Gratiot	1,202	6,740	3,579	-1,959	-539	1,999	1,297	-1,241
Hillsdale	4,900	6,214	3,655	2,341	-348	2,066	1,259	-1,155
Houghton	3,220	5,033	4,755	2,942	918	1,685	1,369	602
Huron	2,376	5,626	4,105	855	-752	1,860	1,254	-1,358
Ingham	14,481	44,506	16,522	-13,503	-179	14,273	5,274	-9,178
Ionia	5,967	8,434	4,199	1,732	506	3,007	1,320	-1,182
Iosco	3,444	5,487	2,566	523	2,284	1,831	917	1,370
Iron	-178	1,529	2,109	402	-47	560	623	16
Isabella	9,516	7,162	3,013	5,367	679	2,346	984	-683
Jackson	8,221	22,559	12,712	-1,626	-3,492	7,038	4,093	-6,437
Kalamazoo	10,828	30,173	13,922	-5,423	5,252	10,402	4,791	-359
Kalkaska	5,580	1,519	913	4,974	389	718	331	2
Kent	33,462	70,882	34,662	-2,758	15,888	27,407	11,190	-330
Keweenaw	-301	271	352	-220	38	74	128	92
Lake	2,050	970	1,102	2,182	815	366	378	827
Lapeer	17,677	10,432	4,447	11,691	-1,374	3,585	1,519	-3,440
Leelanau	3,135	1,627	1,225	2,733	233	644	405	-6
Lenawee	7,997	14,657	7,277	617	-1,810	4,388	2,307	-3,891
Livingston	41,322	11,569	5,001	34,754	-3,111	4,549	1,864	-5,796
Luce	-130	1,024	738	-416	-645	303	246	-702
Mackinac	518	1,455	1,148	211	-137	473	376	-234
Macomb	69,291	96,355	40,065	13,001	-7,017	30,664	15,620	-22,061

TABLE I-4. COMPONENTS OF POPULATION CHANGE IN MICHIGAN, BY COUNTY: CENSUS 1970 TO CENSUS 1980 AND 1 JULY 1983 ESTIMATES (cont.)

	1970 to 1980				1980 to Preliminary 1 July 1983 estimates[a]			
County	Population change	Births[b]	Deaths	Net migration	Population change	Births[b]	Deaths	Net migration
Manistee	2,626	2,903	2,626	2,349	-808	937	805	-940
Marquette	9,415	12,781	5,380	2,014	-1,407	4,211	1,559	-4,059
Mason	3,753	3,493	2,604	2,864	4	1,333	914	-415
Mecosta	8,969	4,680	2,446	6,735	-296	1,438	748	-986
Menominee	1,614	3,538	2,820	896	-682	1,334	930	-1,086
Midland	9,809	11,222	4,001	2,588	696	3,767	1,435	-1,636
Missaukee	2,883	1,443	885	2,325	290	659	293	-77
Monroe	15,444	20,130	8,970	4,284	-5,993	6,074	2,892	-9,175
Montcalm	7,895	7,574	4,420	4,741	1,793	2,617	1,441	617
Montmorency	2,245	947	841	2,139	394	352	317	359
Muskegon	163	25,745	13,599	-11,983	-1,209	8,333	4,434	-5,108
Newaygo	6,925	5,024	3,142	5,043	945	1,796	1,074	223
Oakland	103,922	137,088	65,304	32,138	-5,520	45,095	23,608	-27,007
Oceana	4,018	3,473	2,077	2,622	-414	1,241	629	-1,026
Ogemaw	4,533	2,114	1,834	4,253	45	873	641	-187
Ontonagon	-687	1,590	1,227	-1,050	139	379	372	132
Osceola	4,090	2,901	1,852	3,041	749	1,039	551	261
Oscoda	2,132	762	781	2,151	-66	364	295	-135
Otsego	4,571	2,205	1,067	3,430	290	859	451	-119
Ottawa	28,993	23,300	9,110	14,800	3,833	8,843	3,105	-1,905
Presque Isle	1,431	2,056	1,342	717	-285	693	502	-476
Roscommon	6,482	1,690	1,838	6,630	1,397	753	729	1,373
Saginaw	8,316	39,289	17,738	-13,235	-7,228	11,767	5,474	-13,521
St. Clair	18,627	20,861	12,350	10,116	-700	6,644	3,936	-3,408
St. Joseph	8,691	8,866	4,948	4,773	668	2,998	1,623	-707

TABLE I-5. DISTRIBUTION OF THE MICHIGAN POPULATION BY AGE AND SEX: CENSUS 1980

Age category	Male		Female		Total		U.S.
	Number	Percentage	Number	Percentage	Number	Percentage	Percentage
Under 5	350,158	3.8	334,955	3.6	685,113	7.4	7.2
5 - 9	372,134	4.0	354,986	3.8	727,120	7.8	7.4
10 - 14	409,805	4.4	392,069	4.2	801,874	8.6	8.1
15 - 19	455,211	4.9	446,066	4.8	901,277	9.7	9.2
20 - 24	441,426	4.8	453,004	4.9	894,430	9.7	9.3
25 - 29	399,270	4.3	407,648	4.4	806,918	8.7	8.6
30 - 34	348,315	3.8	360,054	3.9	708,369	7.7	7.8
35 - 39	277,801	3.0	286,626	3.1	564,427	6.1	6.2
40 - 44	226,920	2.4	237,652	2.6	464,572	5.0	5.2
45 - 49	215,594	2.3	229,920	2.5	445,514	4.8	4.9
50 - 54	236,446	2.6	248,971	2.7	485,417	5.3	5.2
55 - 59	225,704	2.4	245,707	2.7	471,411	5.1	5.1
60 - 64	183,822	1.9	209,556	2.3	393,378	4.2	4.5
65 - 69	144,133	1.6	175,268	1.9	319,381	3.5	3.9
70 - 74	100,502	1.1	136,627	1.5	237,129	2.6	3.0
75 - 79	66,767	.7	102,446	1.1	159,213	1.8	2.1
80 - 84	36,894	.4	67,988	.7	104,882	1.1	1.3
85 and over	25,307	.3	56,346	.6	81,653	.9	1.0
Median age	27.8		29.8		28.8		

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF2, computer tape.

TABLE I-6. PERCENTAGE OF POPULATION 65 AND OVER FOR MICHIGAN COUNTIES: CENSUS 1970 AND 1980

County	Percentage		County	Percentage	
	1970	1980		1970	1980
Alcona	17.1	20.56	Lake	20.6	21.09
Alger	11.1	13.02	Lapeer	7.7	7.14
Allegan	9.4	10.29	Leelanau	12.2	13.31
Alpena	8.5	11.76	Lenawee	9.2	10.20
Antrim	13.9	15.09	Livingston	7.7	7.02
Arenac	12.5	13.89	Luce	13.6	13.70
Baraga	12.9	15.33	Mackinac	12.2	15.01
Barry	10.1	10.12	Macomb	4.8	7.70
Bay	8.1	10.11	Manistee	13.5	15.55
Benzie	14.3	14.76	Marquette	8.0	8.83
Berrien	9.2	10.96	Mason	13.1	14.90
Branch	10.3	11.79	Mecosta	8.7	9.06
Calhoun	9.4	11.26	Menominee	13.1	14.14
Cass	9.8	10.92	Midland	5.4	7.28
Charlevoix	11.4	12.23	Missaukee	12.9	12.46
Cheboygan	11.8	13.97	Monroe	7.4	8.38
Chippewa	8.3	12.42	Montcalm	11.2	12.17
Clare	13.2	15.42	Montmorency	15.8	17.79
Clinton	6.9	7.55	Muskegon	8.5	10.70
Crawford	10.9	12.54	Newaygo	11.6	13.09
Delta	11.6	12.69	Oakland	6.6	8.87
Dickinson	15.8	16.84	Oceana	11.8	12.35
Eaton	7.1	7.95	Ogemaw	15.0	15.25
Emmet	12.1	12.53	Ontonagon	9.8	15.94
Genesee	6.5	7.96	Osceola	12.1	13.19
Gladwin	12.9	14.29	Oscoda	17.0	17.67
Gogebic	16.3	20.72	Otsego	9.5	10.90
Grand Traverse	10.9	10.75	Ottawa	7.6	8.72
Gratiot	10.1	11.68	Presque Isle	11.6	15.02
Hillsdale	11.3	12.26	Roscommon	17.2	19.45
Houghton	13.7	15.96	Saginaw	7.7	9.21
Huron	12.8	15.11	St. Clair	9.9	10.67
Ingham	6.8	7.44	St. Joseph	11.0	11.94
Ionia	9.7	9.62	Sanilac	12.0	13.91
Iosco	9.7	13.47	Schoolcraft	13.7	15.39
Iron	16.6	21.90	Shiawassee	8.1	8.68
Isabella	6.4	7.07	Tuscola	9.0	9.63
Jackson	9.2	9.93	Van Buren	11.6	12.17
Kalamazoo	7.7	8.90	Washtenaw	5.8	6.37
Kalkaska	14.6	11.65	Wayne	9.4	10.47
Kent	9.3	10.22	Wexford	12.1	13.17
Keweenaw	14.8	27.66	MICHIGAN	8.5	9.85

SOURCE: Bureau of the Census, tapes.

TABLE I-7. PERCENTAGE OF POPULATION 17 AND UNDER FOR MICHIGAN COUNTIES: CENSUS 1970 AND 1980

County	Percentage		County	Percentage	
	1970	1980		1970	1980
Alcona	32.7	26.09	Lake	32.3	26.69
Alger	36.9	30.12	Lapeer	40.1	35.68
Allegan	38.9	31.99	Leelanau	36.4	28.51
Alpena	40.7	30.79	Lenawee	36.5	31.31
Antrim	36.6	29.42	Livingston	40.2	34.36
Arenac	37.4	30.67	Luce	33.0	29.16
Baraga	35.6	30.96	Mackinac	38.6	29.89
Barry	37.0	31.46	Macomb	40.8	29.87
Bay	38.6	30.56	Manistee	35.7	27.89
Benzie	35.0	28.83	Marquette	33.7	28.04
Berrien	36.5	30.76	Mason	34.8	27.95
Branch	36.3	29.99	Mecosta	28.8	23.35
Calhoun	35.1	28.89	Menominee	36.3	30.13
Cass	36.2	30.72	Midland	41.2	32.20
Charlevoix	38.0	30.09	Misaukee	37.3	32.23
Cheboygan	38.3	30.50	Monroe	40.2	33.33
Chippewa	37.3	27.65	Montcalm	37.2	31.73
Clare	36.1	28.93	Montmorency	34.1	27.68
Clinton	41.6	34.46	Muskegon	39.0	30.74
Crawford	38.4	30.78	Newaygo	38.8	31.55
Delta	37.7	31.22	Oakland	37.7	28.65
Dickinson	33.4	27.02	Oceana	38.1	32.38
Eaton	39.4	31.54	Ogemaw	35.5	29.09
Emmet	36.7	29.21	Ontonagon	38.2	30.17
Genesee	39.8	32.15	Osceola	37.3	31.78
Gladwin	36.3	29.48	Oscoda	33.3	28.05
Gogebic	31.0	24.58	Otsego	39.8	32.73
Grand Traverse	34.8	29.35	Ottawa	39.6	31.86
Gratiot	37.6	31.21	Presque Isle	38.6	29.78
Hillsdale	35.8	30.35	Roscommon	30.2	24.40
Houghton	28.4	22.94	Saginaw	39.9	32.56
Huron	37.7	30.36	St. Clair	37.7	31.83
Ingham	32.6	26.20	St. Joseph	35.5	30.64
Ionia	37.7	31.82	Sanilac	38.2	31.25
Iosco	36.7	28.64	Schoolcraft	36.9	29.50
Iron	29.9	23.63	Shiawassee	39.9	33.74
Isabella	32.0	24.78	Tuscola	39.5	33.41
Jackson	35.9	29.13	Van Buren	37.3	31.65
Kalamazoo	34.0	26.71	Washtenaw	30.0	24.24
Kalkaska	36.8	32.74	Wayne	34.9	29.33
Kent	37.3	29.58	Wexford	37.3	30.55
Keweenaw	26.2	20.63	MICHIGAN	36.6	29.71

SOURCE: Bureau of the Census, tapes.

TABLE I-8. PERCENTAGE DISTRIBUTION OF MICHIGAN POPULATION, BY RACE AND COUNTY: CENSUS 1980

County	White	Percent white	Black	Percent black	American Indian	Percent American Indian	Other races	Percent other	Total population
Alcona	9,660	99.1	6	.0	44	.4	30	.3	9,740
Alger	8,952	97.0	49	.5	194	2.1	30	.3	9,225
Allegan	78,354	96.0	1,471	1.8	408	.5	1,322	1.6	81,555
Alpena	32,134	99.4	19	.0	83	.2	79	.2	32,315
Antrim	16,019	98.9	15	.0	119	.7	41	.2	16,194
Arenac	14,529	98.7	7	.0	87	.5	83	.5	14,706
Baraga	7,656	90.2	58	.6	754	8.8	16	.1	8,484
Barry	45,259	98.8	66	.1	174	.3	282	.6	45,781
Bay	116,172	96.9	1,023	.8	604	.5	2,082	1.7	119,881
Benzie	10,970	97.9	36	.3	143	1.2	56	.4	11,205
Berrien	144,007	84.0	24,817	14.4	593	.3	1,859	1.0	171,276
Branch	39,855	99.1	79	.1	102	.2	152	.3	40,188
Calhoun	125,616	88.7	13,577	9.5	452	.3	1,912	1.3	141,557
Cass	44,740	90.3	4,150	8.3	256	.5	353	.7	49,499
Charlevoix	19,511	98.0	15	.0	325	1.6	56	.2	19,907
Cheboygan	20,347	98.5	13	.0	240	1.1	49	.2	20,649
Chippewa	26,121	89.9	369	1.2	2,395	8.2	144	.4	29,029
Clare	23,620	99.1	8	.0	139	.5	55	.2	23,822
Clinton	54,894	98.2	169	.3	218	.3	612	1.0	55,893
Crawford	9,333	98.6	56	.5	44	.4	32	.3	9,465
Delta	38,290	98.3	12	.0	439	1.1	206	.5	38,947
Dickinson	25,244	99.6	8	.0	37	.1	52	.2	25,341
Eaton	84,846	96.0	1,987	2.2	264	.2	1,240	1.4	88,337
Emmet	22,169	96.4	100	.4	595	2.5	128	.5	22,992
Genesee	362,824	80.5	78,804	17.4	2,696	.5	6,125	1.3	450,449
Gladwin	19,812	99.2	11	.0	96	.4	38	.1	19,957
Gogebic	19,256	97.8	129	.6	260	1.3	41	.2	19,686
Grand Traverse	54,062	98.4	163	.2	394	.7	280	.5	54,899
Gratiot	39,482	97.6	36	.0	126	.3	804	1.9	40,448
Hillsdale	41,682	99.0	101	.2	77	.1	211	.5	42,071

TABLE I-8. PERCENTAGE DISTRIBUTION OF MICHIGAN POPULATION, BY RACE AND COUNTY: CENSUS 1980 (cont.)

County	White	Percent white	Black	Percent black	American Indian	Percent American Indian	Other races	Percent other	Total population
Houghton	37,315	98.5	110	.2	76	.2	371	.9	37,872
Huron	36,096	99.0	25	.0	78	.2	260	.7	36,459
Ingham	242,649	88.0	21,282	7.7	1,523	.5	10,066	3.6	275,520
Ionia	49,402	95.3	1,642	3.1	188	.3	583	1.1	51,815
Iosco	27,219	96.0	654	2.3	158	.5	318	1.1	28,349
Iron	13,533	99.2	2	.0	60	.4	40	.2	13,635
Isabella	52,326	96.7	488	.9	681	1.2	615	1.1	54,110
Jackson	138,529	91.4	10,840	7.1	496	.3	1,630	1.0	151,495
Kalamazoo	192,265	90.5	15,846	7.4	658	.3	3,609	1.6	212,378
Kalkaska	10,875	99.2	3	.0	34	.3	40	.3	10,952
Kent	403,512	90.7	31,460	7.0	2,059	.4	7,475	1.6	444,506
Keweenaw	1,942	98.9	9	.4	1	.0	11	.5	1,963
Lake	6,333	82.1	1,285	16.6	50	.6	43	.5	7,711
Lapeer	68,767	98.1	163	.2	168	.2	940	1.3	70,038
Leelanau	13,757	98.2	18	.1	178	1.2	54	.3	14,007
Lenawee	86,530	96.2	758	.8	171	.1	2,489	2.7	89,948
Livingston	98,808	98.5	478	.4	411	.4	592	.5	100,289
Luce	6,392	95.9	1	.0	254	3.8	12	.1	6,659
Mackinac	9,246	90.8	5	.0	901	8.8	26	.2	10,178
Macomb	675,135	97.1	9,142	1.3	1,942	.2	8,381	1.2	694,600
Manistee	22,615	98.2	47	.2	202	.8	155	.6	23,019
Marquette	71,570	96.5	1,270	1.7	614	.8	647	.8	74,101
Mason	25,727	97.5	178	.6	169	.6	291	1.1	26,365
Mecosta	35,780	96.8	782	2.1	154	.4	245	.6	36,961
Menominee	25,827	98.5	6	.0	307	1.1	61	.2	26,201
Midland	71,844	97.6	566	.7	190	.2	978	1.3	73,578
Missaukee	9,925	99.1	2	.0	34	.3	48	.4	10,009
Monroe	131,025	97.3	2,313	1.7	255	.1	1,055	.7	134,659
Montcalm	46,887	98.5	112	.2	161	.3	395	.8	47,555
Montmorency	7,455	99.5	1	.0	19	.2	17	.2	7,492

TABLE I-8. PERCENTAGE DISTRIBUTION OF MICHIGAN POPULATION, BY RACE AND COUNTY: CENSUS 1980 (cont.)

County	White	Percent white	Black	Percent black	American Indian	Percent American Indian	Other races	Percent other	Total population
Muskegon	135,531	86.0	19,175	12.1	1,120	.7	1,763	1.1	157,589
Newaygo	33,808	96.8	555	1.5	142	.4	412	1.1	34,917
Oakland	942,067	93.1	47,962	4.7	2,737	.2	19,027	1.8	1,011,793
Oceana	20,902	94.9	42	.1	221	1.0	838	3.8	22,002
Ogemaw	16,337	99.3	9	.0	63	.3	27	.1	16,436
Ontonagon	9,773	99.1	3	.0	62	.6	23	.2	9,861
Osceola	18,774	99.1	17	.0	77	.4	60	.3	18,928
Oscoda	6,817	99.4	1	.0	30	.4	10	.1	6,858
Otsego	14,889	99.3	6	.0	29	.1	69	.4	14,993
Ottawa	152,789	97.2	632	.4	420	.2	3,333	2.1	157,174
Presque Isle	14,177	99.3	6	.0	40	.2	44	.3	14,267
Roscommon	16,290	99.4	0	.0	61	.3	33	.2	16,374
Saginaw	182,472	80.0	35,841	15.7	916	.4	8,830	3.8	228,059
St. Clair	134,109	96.6	2,804	2.0	558	.4	1,331	.9	138,802
St. Joseph	54,256	96.7	1,360	2.4	143	.2	324	.5	56,083
Sanilac	40,119	98.3	16	.0	95	.2	559	1.3	40,789
Schoolcraft	8,203	95.6	3	.0	351	4.0	18	.2	8,575
Shiawassee	70,273	98.7	67	.0	317	.4	483	.6	71,140
Tuscola	55,838	98.0	323	.5	184	.3	616	1.0	56,961
Van Buren	60,206	90.1	5,041	7.5	468	.7	1,099	1.6	66,814
Washtenaw	227,091	85.7	28,323	10.6	720	.2	8,614	3.2	264,748
Wayne	1,457,914	62.3	829,983	35.5	6,671	.2	43,323	1.8	2,337,891
Wexford	24,905	99.2	12	.0	85	.3	100	.3	25,102
Total	7,872,241	84.9	1,199,023	12.9	40,050	.4	150,764	1.6	9,262,078

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF1, computer tape.

TABLE I-9. NUMBER OF PERSONS OF SPANISH ORIGIN IN MICHIGAN, BY ETHIC GROUP, AND COUNTY: CENSUS 1980

County	Mexican	Puerto Rican	Cuban	Other Spanish origin	Percent Spanish origin	Total Spanish origin
Alcona	17	5	0	27	.5	49
Alger	19	2	0	15	.3	36
Allegan	1,649	68	6	288	2.4	2,011
Alpena	39	4	0	36	.2	79
Antrim	36	2	0	27	.4	65
Arenac	126	1	0	33	1.0	160
Baraga	17	0	1	19	.4	37
Barry	297	15	1	107	.9	420
Bay	2,739	20	27	376	2.6	3,162
Benzie	59	5	0	41	.9	105
Berrien	894	391	84	719	1.2	2,088
Branch	140	18	1	64	.5	223
Calhoun	1,842	118	17	456	1.7	2,433
Cass	208	32	19	78	.6	337
Charlevoix	33	10	4	15	.3	62
Cheybogan	28	2	8	22	.2	60
Chippewa	44	14	2	31	.3	91
Clare	61	4	4	27	.4	96
Clinton	831	14	18	128	1.7	991
Crawford	35	0	0	14	.5	49
Delta	54	9	2	38	.2	103
Dickinson	17	2	0	27	.1	46
Eaton	1,186	32	92	306	1.8	1,616
Emmet	23	4	2	28	.2	57
Genesee	5,929	275	122	1,323	1.6	7,649
Gladwin	68	4	2	43	.5	117
Gogebic	25	7	2	26	.3	60
Grand Traverse	151	24	8	114	.5	297
Gratiot	1,182	29	9	101	3.2	1,321
Hillsdale	205	16	5	81	.7	307
Houghton	44	8	5	70	.3	127
Huron	320	12	0	64	1.0	396
Ingham	8,270	376	306	1,607	3.8	10,559
Ionia	731	21	6	149	1.7	907
Iosco	111	56	6	86	.9	259
Iron	16	0	0	6	.1	22
Isabella	471	33	7	151	1.2	662
Jackson	1,333	115	33	326	1.1	1,807
Kalamazoo	1,621	146	120	718	1.2	2,605
Kalkaska	28	5	7	14	.4	54

TABLE I-9. NUMBER OF PERSONS OF SPANISH ORIGIN IN MICHIGAN, BY ETHIC GROUP, AND COUNTY: CENSUS 1980 (cont.)

County	Mexican	Puerto Rican	Cuban	Other Spanish origin	Percent Spanish origin	Total Spanish origin
Kent	5,264	1,468	619	1,390	1.9	8,741
Keweenaw	0	1	0	5	.3	6
Lake	30	6	2	12	.6	50
Lapeer	992	174	6	153	1.8	1,325
Leelanau	40	4	0	28	.5	72
Lenawee	3,920	213	7	433	5.0	4,573
Livingston	457	48	27	249	.7	781
Luce	3	0	0	13	.2	16
Mackinac	21	3	0	6	.2	30
Macomb	3,353	443	322	2,520	.9	6,638
Manistee	213	24	1	78	1.3	316
Marquette	226	59	20	184	.6	489
Mason	293	13	3	61	1.4	370
Mecosta	125	15	3	59	.5	202
Menominee	26	10	2	20	.2	58
Midland	473	35	61	241	1.1	810
Missaukee	23	0	1	2	.2	26
Monroe	1,382	71	35	315	1.3	1,803
Montcalm	444	27	3	107	1.2	581
Montmorency	298	0	0	15	.5	44
Muskegon	2,281	149	13	390	1.7	2,833
Newaygo	537	6	5	132	1.9	680
Oakland	8,118	1,738	419	4,203	1.4	14,478
Oceana	1,029	2	0	101	5.1	1,132
Ogemaw	36	1	0	16	.3	53
Ontonagon	6	0	0	10	.1	16
Osceola	62	10	3	31	.5	106
Oscoda	6	2	1	1	.1	10
Otsego	24	2	3	20	.3	49
Ottawa	4,046	227	155	578	3.1	5,006
Presque Isle	13	4	0	21	.2	38
Roscommon	31	10	4	19	.3	64
Saginaw	11,013	193	25	1,125	5.4	12,356
St. Clair	1,592	57	12	405	1.4	2,066
St. Joseph	242	28	6	110	.6	386

TABLE I-4. COMPONENTS OF POPULATION CHANGE IN MICHIGAN, BY COUNTY: CENSUS 1970 TO CENSUS 1980 AND 1 JULY 1983 ESTIMATES (cont.)

County	1970 to 1980				1980 to Preliminary 1 July 1983 estimates[a]			
	Population change	Births[b]	Deaths	Net migration	Population change	Births[b]	Deaths	Net migration
Sanilac	5,608	6,070	4,085	3,623	-1,301	2,078	1,293	-2,086
Schoolcraft	349	1,301	1,109	157	-181	400	324	-257
Shiawassee	8,065	11,780	5,189	1,474	-2,490	3,571	1,636	-4,425
Tuscola	8,358	8,846	4,495	4,007	-1,869	2,816	1,447	-3,238
Van Buren	10,641	10,401	5,928	6,168	263	3,613	1,964	-1,387
Washtenaw	30,645	37,715	13,067	5,997	4,357	12,607	4,587	-3,663
Wayne	-332,477	404,359	247,901	-488,935	-85,789	111,642	73,623	-123,808
Wexford	5,385	3,687	2,362	4,060	909	1,380	819	348
TOTAL	380,252	1,440,182	759,956	-299,974	-106,598	454,834	245,788	-315,644

SOURCE: Michigan Department of Management and Budget, Information System Division, special release.

a. The preliminary estimates are subject to change when more symptomatic data become available.
b. Corrected for underregistration.

TABLE I-9. NUMBER OF PERSONS OF SPANISH ORIGIN IN MICHIGAN, BY ETHIC GROUP, AND COUNTY: CENSUS 1980 (cont.)

County	Mexican	Puerto Rican	Cuban	Other Spanish origin	Percent Spanish origin	Total Spanish origin
Sanilac	694	21	2	144	2.1	861
Schoolcraft	12	0	0	8	.2	20
Shiawassee	588	26	18	186	1.1	818
Tuscola	816	8	6	176	1.7	1,006
Van Buren	1,188	41	10	260	2.2	1,499
Washtenaw	1,726	359	245	1,725	1.5	4,055
Wayne	29,842	5,025	1,211	10,241	1.9	46,318
Wexford	68	4	1	61	.5	134
TOTAL	112,183	12,425	4,177	33,655	1.7	162,440

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF1, computer tape.

TABLE I-10. NUMBER OF PERSONS OF SPANISH ORIGIN IN MICHIGAN, BY RACE AND COUNTY: CENSUS 1980

County	White	Black	American Indian	Asian and Pacific Islander	Other
Alcona	39	0	0	5	5
Alger	25	0	6	0	5
Allegan	914	21	22	15	1,039
Alpena	59	2	1	0	17
Antrim	50	0	1	0	14
Arenac	100	0	2	2	56
Baraga	27	2	2	0	6
Barry	251	0	8	3	158
Bay	1,525	12	55	13	1,557
Benzie	76	0	2	0	27
Berrien	1,186	223	32	31	616
Branch	170	2	0	3	48
Calhoun	1,263	108	7	16	1,029
Cass	193	36	7	12	89
Charlevoix	46	0	6	1	9
Cheboygan	46	0	1	2	11
Chippewa	65	0	3	0	23
Clare	77	0	5	0	14
Clinton	546	3	5	0	437
Crawford	38	0	0	0	11
Delta	82	0	9	0	12
Dickinson	41	0	1	1	3
Eaton	932	20	17	7	640
Emmet	37	1	2	5	11
Genesee	3,610	604	111	73	3,251
Gladwin	102	0	1	4	10
Gogebic	50	0	1	0	9
Grand Traverse	217	0	4	6	70
Gratiot	599	1	3	3	715
Hillsdale	221	0	1	3	82
Houghton	98	1	1	3	24
Huron	223	0	3	6	164
Ingham	4,724	278	120	64	5,373
Ionia	472	32	18	9	376
Iosco	154	5	5	9	86
Iron	17	0	0	0	5
Isabella	352	8	36	4	262
Jackson	926	110	12	7	752
Kalamazoo	1,340	134	23	34	1,074
Kalkaska	44	0	1	0	9

TABLE I-10. NUMBER OF PERSONS OF SPANISH ORIGIN IN MICHIGAN, BY RACE AND COUNTY: CENSUS 1980 (cont.)

County	White	Black	American Indian	Asian and Pacific Islander	Other
Kent	4,140	392	128	55	4,026
Keweenaw	6	0	0	0	0
Lake	33	4	0	0	13
Lapeer	676	7	4	6	632
Leelanau	47	0	0	0	25
Lenawee	2,438	367	23	4	2,072
Livingston	596	2	15	3	165
Luce	13	0	3	0	0
Mackinac	22	0	5	0	3
Macomb	5,044	81	100	228	1,185
Manistee	213	1	9	6	87
Marquette	338	7	12	12	120
Mason	193	1	7	3	166
Mecosta	155	3	2	2	40
Menominee	50	0	0	1	7
Midland	544	13	5	4	244
Missaukee	22	0	3	0	1
Monroe	1,123	16	9	9	646
Montcalm	304	0	17	1	259
Montmorency	41	0	0	1	2
Muskegon	1,467	136	83	18	1,129
Newaygo	339	0	8	1	332
Oakland	9,262	333	171	346	4,366
Oceana	338	0	16	1	777
Ogemaw	49	0	0	0	4
Ontonagon	15	0	0	0	1
Osceola	92	0	1	2	11
Oscoda	5	0	1	0	4
Otsego	41	0	1	0	7
Ottawa	2,644	5	30	18	2,309
Presque Isle	31	0	0	4	3
Roscommon	51	0	1	2	10
Saginaw	4,493	301	165	65	7,332
St. Clair	1,132	43	25	10	856
St. Joseph	262	22	7	4	91

TABLE I-10. NUMBER OF PERSONS OF SPANISH ORIGIN IN MICHIGAN, BY RACE AND COUNTY: CENSUS 1980 (cont.)

County	White	Black	American Indian	Asian and Pacific Islander	Other
Sanilac	392	0	5	0	464
Schoolcraft	19	0	0	0	1
Shiawassee	535	0	15	4	264
Tuscola	563	3	4	6	430
Van Buren	603	36	16	4	840
Washtenaw	2,579	205	34	105	1,132
Wayne	24,766	5,091	455	729	15,277
Wexford	103	0	4	0	27
TOTAL	86,716	8,341	1,928	1,996	63,459

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF1, computer tape.

TABLE I-11. MARITAL STATUS OF PERSONS 15 YEARS OLD OR OLDER: CENSUS 1980

	Male				Female			
County	Married	Separated/ Divorced	Widowed	Never Married	Married	Separated/ Divorced	Widowed	Never Married
Alcona	2,622	213	144	790	2,629	204	608	575
Alger	2,226	241	88	980	2,205	202	442	645
Allegan	19,685	1,684	663	7,675	19,613	2,223	3,173	5,794
Alpena	7,590	644	290	3,403	7,603	851	1,599	2,693
Antrim	4,114	330	147	1,451	4,117	422	815	1,009
Arenac	3,617	300	164	1,387	3,608	337	702	1,007
Baraga	1,944	208	115	1,035	1,926	168	475	528
Barry	11,485	1,081	335	4,212	11,417	1,278	1,639	2,901
Bay	27,429	2,630	1,008	12,387	27,404	3,640	5,453	10,489
Benzie	2,796	245	111	1,027	2,800	306	565	825
Berrien	38,175	4,484	1,606	16,674	38,169	7,048	8,304	14,411
Branch	9,514	1,022	350	3,823	9,469	1,422	1,904	2,964
Calhoun	31,879	4,508	1,352	13,880	31,709	6,622	6,921	11,664
Cass	11,993	1,304	495	4,313	11,995	1,667	2,113	3,342
Charlevoix	4,803	415	179	1,954	4,805	590	966	1,457
Cheboygan	5,121	378	221	1,905	5,127	521	1,002	1,381
Chippewa	6,558	712	312	3,852	6,413	762	1,418	2,602
Clare	6,036	575	271	1,892	6,054	730	1,254	1,544
Clinton	13,247	1,012	308	5,459	13,249	1,383	1,732	4,113
Crawford	2,322	218	99	946	2,289	299	426	611
Delta	9171	675	399	3926	9212	926	2048	3004
Dickinson	6,390	483	364	2,289	6,365	590	1,640	1,762
Eaton	20,964	2,016	534	8,362	20,955	2,808	2,955	7,288
Emmet	5,308	461	205	2,420	5,270	726	1,193	2,047
Genesee	94,749	14,155	3,224	46,717	94,653	21,434	17,916	41,480
Gladwin	5,208	417	197	1,637	5,165	499	899	1,250
Gogebic	4,741	365	333	2,233	4,704	411	1,589	1,529
Grand Traverse	12,518	1,333	376	5,672	12,522	2,138	2,341	5,062
Gratiot	9,394	724	371	3,954	9,416	1,052	2,013	3,437
Hillsdale	10,148	902	356	4,001	10,154	1,213	1,863	3,177

TABLE I-11. MARITAL STATUS OF PERSONS 15 YEARS OLD OR OLDER: CENSUS 1980 (cont.)

County	Male				Female			
	Married	Separated/ Divorced	Widowed	Never Married	Married	Separated/ Divorced	Widowed	Never Married
Houghton	7,437	618	490	8,194	7,417	738	2,176	3,868
Huron	8,969	503	424	3,530	8,921	655	2,045	2,519
Ingham	52,004	7,723	1,558	41,961	51,966	12,295	9,471	39,390
Ionia	11,480	1,393	374	6,965	11,209	1,504	2,140	3,434
Iosco	7,210	582	325	2,807	7,166	746	1,306	1,653
Iron	3,526	257	228	1,279	3,536	304	1,090	892
Isabella	9,632	884	308	9,650	9,590	1,250	1,592	10,285
Jackson	34,881	5,733	1,329	16,625	33,513	5,698	6,635	11,547
Kalamazoo	44,474	5,753	1,415	27,687	44448	9,000	8,332	25,339
Kalkaska	2,734	251	99	847	2,724	288	437	596
Kent	97,805	10,762	3,579	47,510	97,713	16,916	19,197	44,805
Keweenaw	521	47	36	237	527	35	128	102
Lake	1,956	256	131	625	1,959	227	492	437
Lapeer	16,146	1,320	428	6,591	16,139	1,775	2,143	5,262
Leelanau	3,532	284	137	1,442	3,521	273	588	1,076
Lenawee	21,065	1,967	741	8,296	21,085	2,845	3,996	7,202
Livingston	23,848	2,116	581	9,850	23,789	2,561	2,853	7,164
Luce	1,487	127	84	821	1,495	212	370	521
Mackinac	2,473	254	114	998	2,474	234	527	790
Macomb	160,927	15,243	5,209	75,113	160,799	22,341	27,594	63,497
Manistee	5,546	478	302	2,338	5,555	635	1,366	1,784
Marquette	16,506	1,639	649	10,364	16,237	1,700	2,685	7,110
Mason	6,644	596	277	2,435	6,593	678	1,411	1,852
Mecosta	7,122	626	245	7,347	7,082	863	1,237	5,399
Memominee	6,312	444	301	2,689	6,314	504	1,385	1,971
Midland	17,623	1,385	420	7,413	17,540	2,005	2,317	5,795
Missaukee	2,573	162	99	837	2,575	174	410	600
Monroe	31,224	2,999	1,029	12,785	31,165	3,815	4,903	10,486
Montcalm	11,493	1,093	443	4,082	11,514	1,443	2,206	3,061
Montmorency	2,010	167	81	583	2,006	199	387	416

TABLE I-11. MARITAL STATUS OF PERSONS 15 YEARS OLD OR OLDER: CENSUS 1980 (cont.)

	Male				Female			
County	Married	Separated/ Divorced	Widowed	Never Married	Married	Separated/ Divorced	Widowed	Never Married
Muskegon	34,855	4,213	1,463	15,952	34,770	6,235	7,407	14,058
Newaygo	8,611	800	337	2,949	8,598	888	1,660	2,348
Oakland	234,919	26,238	7,436	106,834	234,775	38,304	41,855	90,231
Oceana	5,340	413	199	2,003	5,351	507	1,033	1,502
Ogemaw	4,118	358	226	1,403	4,136	441	834	1,131
Ontonagon	2,395	213	127	1,075	2,385	166	558	630
Osceola	4,606	371	180	1,637	4,609	485	939	1,264
Oscoda	1,801	158	113	519	1,776	163	406	444
Otsego	3,548	258	131	1,399	3,528	380	642	1,145
Ottawa	37,973	2,182	917	15,787	37,937	3,319	5,146	13,388
Presque Isle	3,569	241	168	1,447	3,556	272	739	944
Roscommon	4,480	376	254	1,342	4,487	509	893	975
Saginaw	48,599	5,531	1,802	23,850	48,586	8,492	9,553	21,821
St. Clair	31,785	3,175	1,288	13,264	31,806	4,526	6,425	11,175
St. Joseph	13,569	1,338	451	4,801	13,583	1,943	2,605	3,689
Sanilac	10,024	641	422	3,877	10,019	909	2,013	2,777
Schoolcraft	2,119	146	120	723	2,120	191	506	652
Shiawassee	16,707	1,430	443	6,478	16,738	2,073	2,721	5,108
Tuscola	13,386	1,071	437	5,504	13,356	1,382	2,245	4,308
Van Buren	15,497	1,695	631	6,065	15,480	2,372	3,244	4,622
Washtenaw	50,858	7,584	1,416	45,214	50,520	10,738	7,645	38,233
Wayne	442,870	88,003	27,984	279,858	440,640	128,872	126,218	247,410
Wexford	6,095	531	232	2,103	6,110	810	1,307	1,782
MICHIGAN	2,008,613	256,408	82,830	1,036,241	2,002,455	368,362	413,981	879,081

SOURCE: Bureau of the Census, tapes.

TABLE I-12. NUMBER OF FAMILY AND NON-FAMILY HOUSEHOLDS AND NUMBER OF PERSONS IN FAMILIES AND NON-FAMILY HOUSEHOLDS IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

County	Number of households	Number of families	Percent non-family households	Population in households	Population in families	Percent population in non-family households	Population in group quarters
Houghton	12,975	8,632	33.4	34,302	27,777	19.0	3,570
Huron	12,764	9,851	22.8	35,926	32,788	8.7	533
Ingham	95,179	63,021	33.7	254,429	206,489	18.8	21,091
Ionia	16,230	12,792	21.1	48,374	44,329	8.3	3,441
Iosco	10,162	7,860	22.6	27,320	24,742	9.4	1,029
Iron	5,430	3,969	26.9	13,310	11,769	11.5	325
Isabella	16,044	10,923	31.9	47,058	37,294	20.7	7,052
Jackson	50,974	38,904	23.6	143,425	129,060	10.0	8,070
Kalamazoo	75,405	52,298	30.6	201,559	169,599	15.8	10,819
Kalkaska	3,795	3,016	20.5	10,906	9,987	8.4	46
Kent	155,598	114,746	26.2	432,593	383,000	11.4	11,813
Keweenaw	833	588	29.4	1,947	1,677	13.8	16
Lake	3,050	2,214	27.4	7,706	6,785	11.9	5
Lapeer	21,202	17,813	15.9	58,492	64,391	5.9	1,546
Leelanau	5,023	3,853	23.2	13,903	12,455	10.4	104
Lenawee	30,044	23,706	21.0	87,444	80,047	8.4	2,504
Livingston	31,344	26,091	16.7	98,792	92,188	6.6	1,497
Luce	2,192	1,695	22.6	6,121	5,547	9.3	538
Mackinac	3,680	2,795	24.0	10,092	9,078	10.0	86
Macomb	229,820	183,714	20.0	690,153	635,919	7.8	4,447
Manistee	8,490	6,254	26.3	22,780	20,314	10.8	239
Marquette	24,514	18,219	25.6	68,733	60,303	12.2	5,368
Mason	9,693	7,321	24.4	25,877	23,220	10.2	488
Mecosta	11,134	7,933	28.7	31,537	26,074	17.3	5,424
Menominee	9,283	7,069	23.8	25,927	23,477	9.4	274
Midland	24,498	19,435	20.6	71,974	65,707	8.7	1,604
Missaukee	3,427	2,799	18.3	9,977	9,291	6.8	32
Monroe	43,110	35,302	18.1	133,370	124,225	6.8	1,289
Montcalm	16,453	12,914	21.9	47,173	42,971	8.9	382
Montmorency	2,814	2,194	22.0	7,492	6,782	9.4	0

TABLE I-12. NUMBER OF FAMILY AND NON-FAMILY HOUSEHOLDS AND NUMBER OF PERSONS IN FAMILIES AND NON-FAMILY HOUSEHOLDS IN MICHIGAN, BY COUNTY: CENSUS 1980

County	Number of households	Number of families	Percent non-family households	Population in households	Population in families	Percent population in non-family households	Population in group quarters
Alcona	3,715	2,864	22.9	9,649	8,674	10.1	91
Alger	3,279	2,487	24.1	9,043	8,158	9.7	182
Allegan	27,232	21,839	19.8	80,445	74,095	7.8	1,110
Alpena	11,151	8,664	22.3	31,900	29,088	8.8	415
Antrim	5,723	4,506	21.2	16,030	14,612	8.8	164
Arenac	5,099	4,062	20.3	14,606	13,446	7.9	100
Baraga	2,929	2,167	26.0	8,221	7,370	10.3	263
Barry	15,433	12,565	18.5	45,121	41,788	7.3	660
Bay	41,348	31,525	23.7	118,787	107,574	9.4	1,094
Benzie	4,008	3,129	21.9	11,108	10,076	9.2	97
Berrien	60,276	45,722	24.1	168,543	151,836	9.9	2,733
Branch	14,014	10,798	22.9	39,176	35,385	9.6	1,012
Calhoun	51,123	37,772	26.1	137,362	121,759	11.3	4,195
Cass	17,236	13,636	20.8	49,267	45,075	8.5	232
Charlevoix	7,056	5,371	23.8	19,747	17,782	9.9	160
Cheboygan	7,277	5,730	21.2	20,522	18,780	8.4	127
Chippewa	9,931	7,392	25.5	27,152	24,182	10.9	1,877
Clare	8,686	6,745	22.3	23,603	21,351	9.5	219
Clinton	17,755	14,643	17.5	55,701	51,929	6.7	192
Crawford	3,315	2,582	22.1	9,236	8,408	8.9	229
Delta	13,568	10,368	23.5	38,578	34,933	9.4	369
Dickinson	9,635	7,117	25.3	24,968	22,341	10.5	373
Eaton	30,137	23,419	22.2	87,168	78,911	9.4	1,169
Emmet	8,107	5,923	26.9	22,350	19,720	11.7	642
Genesee	154,641	117,715	23.8	446,703	402,852	9.8	3,746
Gladwin	7,159	5,562	21.0	19,863	18,165	8.5	94
Gogebic	7,578	5,372	29.1	19,116	16,748	12.3	570
Grand Traverse	19,167	14,100	26.4	52,932	46,322	12.4	1,967
Gratiot	13,319	10,458	21.4	38,683	35,379	8.5	1,765
Hillsdale	14,383	11,250	21.7	40,903	37,232	8.9	1,168

TABLE I-12. NUMBER OF FAMILY AND NON-FAMILY HOUSEHOLDS AND NUMBER OF PERSONS IN FAMILIES AND NON-FAMILY HOUSEHOLDS IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

County	Number of households	Number of families	Percent non-family households	Population in households	Population in families	Percent population in non-family households	Population in group quarters
Muskegon	54,526	41,743	23.4	154,739	140,053	9.4	2,850
Newaygo	12,134	9,520	21.5	34,657	31,716	8.4	260
Oakland	355,187	269,390	24.1	1,001,269	897,778	10.3	10,524
Oceana	7,418	5,885	20.6	21,737	20,035	7.8	265
Ogemaw	5,940	4,606	22.4	16,183	14,679	9.2	253
Ontonagon	3,524	2,681	23.9	9,703	8,780	9.5	158
Osceola	6,558	5,144	21.5	18,737	17,165	8.3	191
Oscoda	2,517	1,943	22.8	6,751	6,094	9.7	107
Otsego	4,921	3,939	19.9	14,615	13,431	8.1	378
Ottawa	50,449	41,216	18.3	153,450	141,830	7.5	3,724
Presque Isle	5,008	3,925	21.6	14,145	12,955	8.4	122
Roscommon	6,519	4,948	24.0	16,226	14,410	11.1	148
Saginaw	76,116	58,934	22.5	224,970	204,933	8.9	3,089
St. Clair	47,308	36,691	22.4	137,994	125,640	8.9	808
St. Joseph	19,794	15,321	22.5	55,591	50,479	9.1	492
Sanilac	13,959	11,107	20.4	40,308	37,136	7.8	481
Schoolcraft	3,045	2,355	22.6	8,469	7,680	9.3	106
Shiawassee	23,359	18,746	19.7	70,706	65,370	7.5	434
Tuscola	18,290	14,823	18.9	55,822	51,829	7.1	1,139
Van Buren	23,121	17,892	22.6	66,168	60,068	9.2	646
Washtenaw	92,937	59,424	36.0	243,603	192,981	20.7	21,145
Wayne	824,169	591,902	28.1	2,308,196	2,035,037	11.8	29,695
Wexford	8,983	6,875	23.4	24,827	22,447	9.5	275
TOTAL	3,195,213	2,392,504	25.1	9,064,141	8,083,782	10.8	197,937

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, computer tape.

TABLE I-13. POPULATION IN GROUP QUARTERS IN MICHIGAN BY TYPE AND COUNTY: CENSUS 1980

County	Population in group quarters	Percent in group quarters	Inmate: mental hospital	Inmate: home for the aged	Inmate: other institution	Military barracks	College dormitory	Other group quarters
Alcona	80	.8	0	80	0	0	0	0
Alger	181	1.9	14	78	83	0	0	6
Allegan	1,118	1.3	33	583	486	0	0	16
Alpena	406	1.2	16	183	59	0	139	9
Antrim	155	.9	0	123	32	0	0	0
Arenac	92	.6	0	28	61	0	0	3
Baraga	260	3.0	0	102	109	0	34	15
Barry	664	1.4	15	292	53	0	23	281
Bay	1,071	.8	40	623	149	0	136	123
Benzie	92	.8	0	54	38	0	0	0
Berrien	2,704	1.5	43	1,076	393	0	1,096	96
Branch	1,022	2.5	86	292	644	0	0	0
Calhoun	4,138	2.9	862	1,233	345	0	1,489	209
Cass	238	2.4	0	1,221	17	0	0	0
Charlevoix	161	.8	0	84	0	0	0	77
Cheboygan	126	.6	10	72	33	0	0	11
Chippewa	1,870	6.4	0	163	757	0	818	132
Clare	212	.8	0	191	10	0	0	11
Clinton	203	.3	0	135	15	0	0	53
Crawford	229	2.4	0	0	198	0	0	31
Delta	360	.9	11	306	18	0	0	25
Dickinson	357	1.4	0	207	20	0	0	130
Eaton	1,125	1.2	60	430	80	0	533	22
Emmet	635	2.7	12	260	134	0	119	110
Genesee	3,702	.8	21	1,995	489	0	820	377
Gladwin	95	.4	0	90	5	0	0	0
Gogebic	566	2.8	0	278	224	0	41	23
Grand Traverse	1,999	3.6	495	524	225	0	654	101
Gratiot	1,730	4.2	25	650	52	0	938	65
Hillsdale	1,171	2.7	0	351	11	0	679	130

TABLE I-13. POPULATION IN GROUP QUARTERS IN MICHIGAN BY TYPE AND COUNTY: CENSUS 1980 (cont.)

County	Population in group quarters	Percent in group quarters	Inmate: mental hospital	Inmate: home for the aged	Inmate: other institution	Military barracks	College dormitory	Other group quarters
Houghton	3,602	9.5	0	416	25	0	3,152	9
Huron	544	1.4	9	290	104	0	0	141
Ingham	21,047	7.6	54	1,384	598	0	17,979	1,032
Ionia	3,491	6.7	44	251	3,142	0	0	54
Iosco	1,037	3.6	0	174	23	0	0	840
Iron	327	2.3	0	284	10	0	0	33
Isabella	7,072	13.0	0	176	633	0	6,210	53
Jackson	8,011	5.2	11	917	6,319	0	574	190
Kalamazoo	10,884	5.1	909	1,525	538	0	7,164	748
Kalkaska	46	.4	11	21	0	0	0	14
Kent	11,797	2.6	170	3,973	1,479	0	3,974	2,201
Keweenaw	5	.2	0	0	0	0	0	5
Lake	4	.0	0	4	0	0	0	0
Lapeer	1,549	2.2	26	418	1,010	0	0	95
Leelanau	112	.7	0	87	9	0	0	16
Lenawee	2,542	2.8	15	486	405	0	1,099	537
Livingston	1,509	1.5	84	308	1,090	0	0	27
Luce	542	8.1	411	107	12	0	0	12
Mackinac	85	.8	0	73	9	0	0	3
Macomb	4,471	.6	434	2,936	685	0	0	416
Manistee	235	1.0	31	195	9	0	0	0
Marquette	5,385	7.2	38	427	993	0	2,977	950
Mason	519	1.9	0	247	156	0	0	116
Mecosta	5,399	14.6	11	123	16	0	5,221	28
Menominee	276	1.0	0	267	9	0	0	0
Midland	1,619	2.2	47	500	60	0	935	77
Missaukee	29	.2	0	29	0	0	0	0
Monroe	1,283	.9	24	693	113	0	36	417
Montcalm	370	.7	28	209	71	0	0	62
Montmorency	0	.0	0	0	0	0	0	0

TABLE I-13. POPULATION IN GROUP QUARTERS IN MICHIGAN BY TYPE AND COUNTY: CENSUS 1980 (cont.)

County	Population in group quarters	Percent in group quarters	Inmate: mental hospital	Inmate: home for the aged	Inmate: other institution	Military barracks	College dormitory	Other group quarters
Muskegon	2,859	1.8	0	1,063	1,321	0	78	397
Newaygo	255	.7	0	233	22	0	0	0
Oakland	10,574	1.0	1,183	4,477	1,303	0	2,546	1,065
Oceana	265	1.2	84	96	40	0	0	45
Ogemaw	251	1.5	14	231	0	0	0	6
Ontonagon	159	1.6	0	132	0	0	0	27
Osceola	190	1.0	0	104	80	0	0	6
Oscoda	110	1.6	0	107	0	0	0	3
Otsego	375	2.5	188	123	64	0	0	0
Ottawa	3,780	2.4	7	1,147	229	0	2,151	246
Presque Isle	120	.8	10	72	10	0	0	28
Roscommon	143	.8	0	49	94	0	0	0
Saginaw	3,066	1.3	210	1,377	489	0	613	377
St. Clair	779	.5	10	578	138	0	0	53
St. Joseph	492	.8	19	335	91	0	0	47
Sanilac	480	1.1	31	117	207	0	0	125
Schoolcraft	123	1.4	7	106	0	0	0	10
Shiawassee	444	.6	0	347	42	0	22	33
Tuscola	1,172	2.0	0	367	778	0	0	27
Van Buren	649	.9	0	455	115	0	0	79
Washtenaw	21,188	8.0	1,281	1,157	1,625	0	15,489	1,636
Wayne	29,507	1.2	2,476	15,700	5,775	0	1,294	4,262
Wexford	251	.9	0	208	35	0	0	8
TOTAL	197,786	2.1	9,620	55,805	34,716	0	79,033	18,612

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF3, computer tape.

TABLE I-14. IN-MIGRATION, OUT-MIGRATION, AND NET MIGRATION STREAMS BETWEEN MICHIGAN AND OTHER STATES: 1975-1980: CENSUS 1980

Regions, States	In-migration from	Out-migration to	Net migration stream
Regions:			
Northeast	64,192	57,801	6,391
North Central	177,204	174,317	2,887
South	133,753	285,598	-151,845
West	65,064	169,451	-104,387
Northeast:			
New England	15,966	18,469	-2,503
Middle Atlantic	48,226	39,332	8,894
North Central:			
East North Central	149,057	134,027	15,030
West North Central	28,147	40,290	-12,143
South:			
South Atlantic	75,141	160,387	-85,246
East South Central	32,011	55,319	-23,308
West South Central	26,601	69,892	-43,291
West:			
Mountain	21,223	69,206	-47,983
Pacific	43,841	100,245	-56,404
New England:			
Maine	1,938	1,634	304
New Hampshire	864	1,606	-742
Vermont	464	921	-457
Massachusetts	6,752	7,944	-1,192
Rhode Island	969	1,011	-42
Connecticut	4,979	5,353	-374
Middle Atlantic:			
New York	22,763	18,250	4,513
New Jersey	9,243	8,177	1,066
Pennsylvania	16,220	12,905	3,315
East North Central:			
Ohio	56,454	45,524	10,930
Indiana	31,259	30,769	490
Illinois	44,206	36,589	7,617
Wisconsin	17,138	21,145	-4,007
West North Central:			
Minnesota	6,551	11,008	-4,457
Iowa	4,786	5,538	-752
Missouri	8,870	12,195	-3,325
North Dakota	1,080	1,453	-373
South Dakota	784	1,267	-483
Nebraska	2,424	3,408	-984
Kansas	3,652	5,421	-1,769

TABLE I-14. IN-MIGRATION, OUT-MIGRATION, AND NET MIGRATION STREAMS BETWEEN MICHIGAN AND OTHER STATES: 1975-1980: CENSUS 1980 (cont.)

Regions, States	In-migration from	Out-migration to	Net migration stream
South Atlantic:			
Delaware	1,285	929	356
Maryland	7,249	6,137	1,112
District of Columbia	1,413	1,585	-172
Virginia	11,054	14,990	-3,936
West Virginia	3,548	4,396	-848
North Carolina	8,816	13,090	-4,274
South Carolina	3,413	8,271	-4,858
Georgia	7,698	15,743	-8,045
Florida	30,665	95,246	-64,581
East South Central:			
Kentucky	9,504	17,820	-8,316
Tennessee	9,305	21,056	-11,751
Alabama	7,656	11,354	-3,698
Mississippi	5,546	5,089	457
West South Central:			
Arkansas	4,818	8,521	-3,703
Louisiana	3,076	6,312	-3,236
Oklahoma	3,067	8,005	-4,938
Texas	15,640	47,054	-31,414
Mountain:			
Montana	994	1,919	-925
Idaho	789	2,399	-1,610
Wyoming	848	2,529	-1,681
Colorado	7,637	18,735	-11,098
New Mexico	1,732	4,066	-2,334
Arizona	6,284	31,498	-25,214
Utah	1,767	2,961	-1,194
Nevada	1,172	5,099	-3,927
Pacific:			
Washington	4,283	11,284	-7,001
Oregon	2,175	6,087	-3,912
California	32,906	76,795	-43,889
Alaska	2,296	2,735	-439
Hawaii	2,181	3,344	-1,163
Abroad	77,831	-	77,831
TOTAL	518,044	687,167	-169,123

SOURCE: U.S. Bureau of the Census: "State of Residence in 1975 by State of Residence in 1980." Supplementary Report, 1980 Census of Population, PC80-S1-9, March 1983.

TABLE I-15. RESIDENCE IN 1975 OF THE MICHIGAN POPULATION 5 YEARS OLD AND OLDER BY COUNTY: CENSUS 1980

County	Population 5 and older	Same house	Different house same county	Other Michigan county	Other state, Northeast	Other state, No.central	Other state, south	Other state, west	Abroad
Alcona	9,160	5,355	1,172	2,230	30	101	134	103	35
Alger	8,636	5,037	2,082	1,050	13	271	45	100	38
Allegan	75,129	44,575	15,428	10,923	176	2,306	1,063	417	241
Alpena	29,970	18,245	7,642	3,194	77	270	232	164	146
Antrim	14,948	8,770	2,364	3,097	25	302	118	242	30
Arenac	13,632	7,989	2,500	2,798	51	84	60	87	63
Baraga	7,862	4,898	1,611	1,033	8	220	10	73	9
Barry	42,244	24,124	8,424	7,923	251	729	440	254	99
Bay	110,445	68,283	31,468	7,461	259	945	922	503	574
Benzie	10,494	5,760	1,899	2,347	32	218	73	92	73
Berrien	157,921	89,025	45,982	6,558	1,292	7,906	3,044	2,219	1,895
Branch	37,036	21,237	9,396	3,840	54	1,751	487	181	90
Calhoun	131,347	74,961	37,179	10,848	778	3,350	2,423	1,060	748
Cass	45,793	28,334	8,445	4,039	190	3,737	520	354	174
Charlevoix	18,286	10,189	3,864	3,046	78	366	458	228	57
Cheboygan	19,291	11,494	3,432	3,625	21	327	173	194	25
Chippewa	27,041	14,715	6,067	4,221	192	765	421	486	174
Clare	22,182	12,217	3,422	5,919	28	192	267	112	25
Clinton	51,371	31,676	7,978	10,092	198	620	422	244	141
Crawford	8,674	4,674	1,524	2,161	100	20	130	56	9
Delta	35,936	22,107	9,031	2,739	50	1,222	326	308	153
Dickinson	23,456	15,432	4,746	1,586	33	1,230	119	235	75
Eaton	81,573	41,823	14,826	20,006	336	2,060	1,468	699	355
Emmet	21,299	11,107	4,987	3,945	240	474	298	177	71
Genesee	414,742	237,468	134,304	23,387	2,108	6,020	6,765	2,564	2,126
Gladwin	18,519	10,229	2,949	4,525	37	320	249	186	24
Gogebic	18,630	13,035	3,327	962	3	1,132	59	60	52
Grand Traverse	50,801	22,436	11,469	12,267	708	1,315	1,008	1,235	363
Gratiot	37,217	22,606	8,239	5,260	251	421	259	115	66
Hillsdale	38,924	22,002	9,211	4,956	252	1,505	541	331	126

TABLE I-15. RESIDENCE IN 1975 OF THE MICHIGAN POPULATION 5 YEARS OLD AND OLDER BY COUNTY: CENSUS 1980 (cont.)

County	Population 5 and older	Same house	Different house same county	Other Michigan county	Other state, Northeast	Other state, No.central	Other state, south	Other state, west	Abroad
Houghton	35,632	19,488	5,564	7,236	368	1,638	493	378	467
Huron	33,678	22,353	6,616	3,724	72	411	272	131	99
Ingham	255,951	108,225	69,738	54,303	3,775	7,009	5,446	2,563	4,892
Ionia	47,416	27,428	9,596	8,786	111	727	423	172	173
Iosco	26,053	11,521	3,882	5,65[illegible]	685	1,128	1,073	1,198	911
Iron	12,782	8,718	1,813	853	39	1,056	49	214	40
Isabella	50,616	21,028	10,053	16,930	321	620	848	344	482
Jackson	140,177	77,741	38,742	15,100	1,032	3,217	2,381	1,002	962
Kalamazoo	198,453	94,345	57,329	30,928	2,159	6,075	3,422	1,820	2,375
Kalkaska	10,058	4,894	1,848	2,773	1	304	95	126	17
Kent	409,718	221,316	125,914	36,336	2,743	9,636	6,298	3,711	3,764
Keweenaw	1,841	1,253	88	278	22	46	56	53	45
Lake	7,242	4,235	814	1,840	37	163	120	33	0
Lapeer	64,223	34,848	12,866	14,323	299	564	614	353	356
Leelanau	13,128	7,429	1,913	2,835	131	254	221	267	78
Lenawee	82,681	46,159	23,377	8,569	211	2,789	969	340	267
Livingston	92,455	44,123	16,190	27,716	628	1,838	717	847	396
Luce	6,220	3,709	1,268	957	22	117	66	69	12
Mackinac	9,380	5,524	1,982	1,284	13	239	180	123	35
Macomb	648,070	387,619	141,993	92,450	2,812	5,687	7,998	3,775	5,736
Manistee	21,603	13,939	4,107	2,762	81	357	206	125	26
Marquette	67,865	31,071	16,295	9,509	975	4,235	2,180	1,949	1,651
Mason	24,595	14,372	5,596	3,268	124	670	219	216	130
Mecosta	34,593	14,295	5,354	12,626	273	988	561	154	342
Meonomiee	24,052	16,376	4,304	1,219	65	1,762	188	91	47
Midland	67,907	35,847	16,742	8,704	952	1,640	1,882	1,251	889
Missaukee	9,171	5,263	1,507	2,166	9	84	54	77	11
Monroe	123,379	73,426	27,432	10,549	769	7,952	1,998	781	472
Montcalm	43,695	26,152	8,844	7,126	123	527	387	384	152
Montmorency	6,978	3,890	1,189	1,578	13	37	82	160	29

TABLE I-15. RESIDENCE IN 1975 OF THE MICHIGAN POPULATION 5 YEARS OLD AND OLDER BY COUNTY: CENSUS 1980 (cont.)

County	Population 5 and older	Same house	Different house same county	Other Michigan county	Other state, Northeast	Other state, No.central	Other state, south	Other state, west	Abroad
Muskegon	145,289	87,578	41,273	9,710	634	2,430	1,957	1,156	551
Newaygo	32,242	19,380	5,964	5,495	170	635	395	164	39
Oakland	943,655	499,384	235,464	141,927	11,319	20,057	15,650	6,969	12,885
Oceana	20,098	12,261	4,129	2,815	73	255	297	193	75
Ogemaw	15,320	9,289	2,173	3,366	12	162	170	133	15
Ontonagon	9,270	6,566	1,597	673	50	227	61	77	19
Osceola	17,462	10,034	3,483	3,321	43	144	279	139	19
Oscoda	6,390	3,565	811	1,631	10	221	103	33	16
Otsego	13,847	6,979	3,328	3,188	37	46	135	109	25
Ottawa	144,721	81,308	31,634	22,059	967	3,962	2,329	1,433	1,029
Presque Isle	13,225	9,028	2,250	1,532	21	145	144	41	64
Roscommon	15,311	7,519	2,687	4,485	13	274	145	144	44
Saginaw	209,465	126,467	61,319	13,630	629	2,357	3,022	1,144	897
St. Clair	128,168	73,104	31,921	18,479	656	1,260	1,528	648	572
St. Joseph	51,569	28,869	13,753	5,066	274	2,508	777	231	91
Sanilac	37,804	23,890	7,111	5,924	132	222	274	156	95
Schoolcraft	7,924	4,542	2,033	988	12	194	77	78	0
Shiawassee	65,060	39,040	14,225	9,567	173	788	677	382	208
Tuscola	52,330	32,175	11,126	7,246	106	707	589	263	118
Van Buren	61,662	33,830	14,323	9,117	125	2,520	1,241	406	100
Washtenaw	247,813	98,789	61,381	50,778	7,781	10,061	7,672	4,801	6,550
Wayne	2,167,637	1,320,703	665,093	76,400	14,123	25,475	34,015	10,409	21,419
Wexford	23,272	13,150	4,992	3,979	96	605	184	179	87
Total	8,581,675	4,843,840	2,249,994	969,797	64,192	177,204	133,753	65,064	77,831

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF3, computer tape.

TABLE I-16. DISTRIBUTION OF MICHIGAN HOUSEHOLDS, BY TYPE AND COUNTY: CENSUS 1980

County	Married-couple family				Single parent household with children				One person household		Other household type	
	With children		No children		Female head		Male head					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alcona	1,044	28.1	1,520	40.9	143	3.8	46	1.2	759	20.4	92	2.4
Alger	1,136	34.6	1,023	31.1	152	4.6	37	1.1	711	21.6	81	2.4
Allegan	10,698	39.2	8,508	31.2	1,462	5.3	307	1.1	4,625	16.9	768	2.8
Alpena	4,056	36.3	3,386	30.3	690	6.1	113	1.0	2,237	20.0	250	2.2
Antrim	1,950	34.0	2,050	35.8	270	4.7	58	1.0	1,055	18.4	162	2.8
Arenac	1,781	34.9	1,764	34.5	264	5.1	48	.9	938	18.3	99	1.9
Baraga	999	34.1	867	29.6	139	4.7	32	1.0	695	23.7	67	2.2
Barry	6,119	39.6	5,067	32.8	787	5.0	182	1.1	2,508	16.2	360	2.3
Bay	14,993	36.2	11,827	28.6	2,556	6.1	419	1.0	8,721	21.0	1,102	2.6
Benzie	1,355	33.8	1,374	34.2	206	5.1	45	1.1	753	18.7	126	3.1
Berrien	19,243	31.9	17,888	29.6	5,574	9.2	650	1.0	12,836	21.2	1,718	2.8
Branch	4,853	34.6	4,404	31.4	904	6.4	197	1.4	2,799	19.9	417	2.9
Calhoun	15,766	30.8	15,151	29.6	4,270	8.3	641	1.2	11,606	22.7	1,745	3.4
Cass	6,206	36.0	5,522	32.0	1,048	6.0	223	1.2	3,159	18.3	441	2.5
Charlevoix	2,482	35.1	2,171	30.7	391	5.5	82	1.1	1,457	20.6	228	3.2
Cheboygan	2,544	34.9	2,437	33.4	388	5.3	76	1.0	1,385	19.0	162	2.2
Chippewa	3,206	32.2	3,049	30.7	615	6.1	103	1.0	2,196	22.1	343	3.4
Clare	2,672	30.7	3,208	36.9	511	5.8	96	1.1	1,700	19.5	241	2.7
Clinton	7,863	44.2	5,157	29.0	903	5.0	214	1.2	2,617	14.7	495	2.7
Crawford	1,130	34.0	1,097	33.0	215	6.4	46	1.3	656	19.7	77	2.3
Delta	5,057	37.2	3,948	29.0	718	5.2	128	.9	2,869	21.1	331	2.4
Dickinson	3,048	31.9	3,193	33.4	367	3.8	84	.8	2,253	23.6	166	1.7
Eaton	11,861	39.3	8,675	28.7	1,655	5.4	349	1.1	5,482	18.1	1,236	4.1
Emmet	2,719	33.5	2,384	29.4	429	5.2	79	.9	1,840	22.6	344	4.2
Genesee	52,651	34.0	39,614	25.6	16,615	10.7	2,290	1.4	31,487	20.3	5,439	3.5

TABLE I-16. DISTRIBUTION OF MICHIGAN HOUSEHOLDS, BY TYPE AND COUNTY: CENSUS 1980 (cont.)

County	Married-couple family				Single parent household with children				One person household		Other household type	
	With children		No children		Female head		Male head					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Gladwin	2,355	32.8	2,683	37.4	370	5.1	62	.8	1,358	18.9	149	2.0
Gogebic	1,994	26.3	2,584	34.0	270	3.5	71	.9	2,075	27.3	131	1.7
Grand Traverse	6,608	34.4	5,561	29.0	1,144	5.9	195	1.0	3,930	20.5	1,137	5.9
Gratiot	5,075	38.0	4,105	30.8	780	5.8	126	.9	2,544	19.1	317	2.3
Hillsdale	5,210	36.2	4,698	32.6	756	5.2	158	1.0	2,748	19.1	385	2.6
Houghton	3,366	25.9	3,861	29.7	512	3.9	87	.6	3,321	25.5	1,022	7.8
Huron	4,427	34.6	4,307	33.7	513	4.0	107	.8	2,724	21.3	189	1.4
Ingham	27,055	28.4	23,378	24.5	7,849	8.2	1,143	1.2	22,319	23.4	9,839	10.3
Ionia	6,402	39.4	4,565	28.1	1,071	6.5	193	1.1	2,981	18.3	457	2.8
Iosco	3,519	34.6	3,439	33.8	520	5.1	102	1.0	2,076	20.4	226	2.2
Iron	1,397	25.7	2,040	37.5	207	3.8	53	.9	1,391	25.6	70	1.2
Isabella	5,316	33.1	4,053	25.2	876	5.4	167	1.0	2,938	18.3	2,183	13.6
Jackson	17,606	34.5	15,081	29.5	3,688	7.2	637	1.2	10,324	20.2	1,746	3.4
Kalamazoo	22,511	29.8	20,758	27.5	5,493	7.2	835	1.1	17,218	22.8	5,889	7.8
Kalkaska	1,422	37.4	1,249	32.9	208	5.4	49	1.2	676	17.8	103	2.7
Kent	51,635	33.1	43,701	28.0	11,805	7.5	1,505	.9	34,004	21.8	6,848	4.4
Keweenaw	166	19.9	342	41.0	21	2.5	3	.3	228	27.3	17	2.0
Lake	735	24.0	1,165	38.1	157	5.1	41	1.3	768	25.1	68	2.2
Lapeer	10,166	47.9	5,560	26.2	1,221	5.7	266	1.2	2,859	13.4	530	2.4
Leelanau	1,701	33.8	1,757	34.9	159	3.1	57	1.1	939	18.6	231	4.5
Lenawee	11,387	37.9	9,148	30.4	1,781	5.9	340	1.1	5,528	18.3	810	2.6
Livingston	14,393	45.9	8,862	28.2	1,535	4.8	402	1.2	4,206	13.4	1,047	3.3
Luce	753	34.3	676	30.8	139	6.3	35	1.5	445	20.3	52	2.3
Mackinac	1,210	32.8	1,214	32.9	194	5.2	61	1.6	788	21.4	97	2.6
Macomb	88,760	38.6	68,277	29.7	13,248	5.7	2,423	1.0	39,494	17.1	6,612	2.8

TABLE I-16. DISTRIBUTION OF MICHIGAN HOUSEHOLDS, BY TYPE AND COUNTY: CENSUS 1980 (cont.)

County	Married-couple family				Single parent household with children				One person household		Other household type	
	With children		No children		Female head		Male head					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Manistee	2,695	31.7	2,752	32.4	378	4.4	80	.9	2,056	24.2	180	2.1
Marquette	9,194	37.7	6,700	27.3	1,163	4.7	247	1.0	4,853	19.7	1,442	5.8
Mason	3,135	32.3	3,318	34.2	444	4.5	101	1.0	2,140	22.0	232	2.3
Mecosta	3,473	31.1	3,429	30.7	580	5.2	99	.8	2,085	18.7	1,116	10.0
Menominee	3,313	35.6	2,876	30.9	363	3.9	90	.9	2,013	21.6	201	2.1
Midland	10,089	41.1	7,114	29.0	1,341	5.4	268	1.0	4,182	17.0	881	3.5
Missaukee	1,341	39.1	1,170	34.1	139	4.0	45	1.3	582	16.9	46	1.3
Monroe	18,467	42.8	12,010	27.8	2,603	6.0	637	1.4	6,794	15.7	1,014	2.3
Montcalm	5,931	35.8	5,336	32.2	974	5.8	179	1.0	3,203	19.3	426	2.5
Montmorency	835	29.6	1,123	39.9	123	4.3	37	1.3	552	19.6	68	2.4
Muskegon	18,022	33.0	15,909	29.1	5,078	9.3	638	1.1	11,275	20.6	1,508	2.7
Newaygo	4,445	36.6	3,978	32.7	605	4.9	130	1.0	2,365	19.4	249	2.0
Oakland	122,278	34.4	106,838	30.0	20,864	5.8	4,055	1.1	71,427	20.1	14,370	4.0
Oceana	2,837	38.2	2,378	32.0	385	5.1	68	.9	1,390	18.7	143	1.9
Ogemaw	1,915	32.2	2,102	35.3	306	5.1	88	1.4	1,193	20.0	141	2.3
Ontonagon	1,218	34.5	1,120	31.7	119	3.3	45	1.2	777	22.0	66	1.8
Osceola	2,386	36.3	2,127	32.4	346	5.2	75	1.1	1,293	19.7	121	1.8
Oscoda	765	30.3	965	38.3	115	4.5	30	1.1	508	20.1	66	2.6
Otsego	1,964	39.9	1,471	29.8	278	5.6	69	1.4	842	17.1	140	2.8
Ottawa	21,741	43.0	15,500	30.7	2,206	4.3	396	.7	7,645	15.1	1,588	3.1
Presque Isle	1,775	35.4	1,702	33.9	209	4.1	47	.9	1,002	20.0	81	1.6
Roscommon	1,609	24.6	2,772	42.5	332	5.0	52	.7	1,379	21.1	192	2.9
Saginaw	27,062	35.5	20,344	26.7	7,375	9.6	861	1.1	14,899	19.5	2,283	2.9
St. Clair	17,468	36.9	13,584	28.7	3,240	6.8	506	1.0	9,259	19.5	1,358	2.8
St. Joseph	7,048	35.6	6,252	31.5	1,154	5.8	235	1.1	3,951	19.9	522	2.6

TABLE I-16. DISTRIBUTION OF MICHIGAN HOUSEHOLDS, BY TYPE AND COUNTY: CENSUS 1980 (cont.)

County	Married-couple family				Single parent household with children				One person household		Other household type	
	With children		No children		Female head		Male head					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Sanilac	5,154	36.9	4,623	33.1	673	4.8	134	.9	2,594	18.5	258	1.8
Schoolcraft	1,012	33.2	1,044	34.2	151	4.9	34	1.1	621	20.3	69	2.2
Shiawassee	9,743	41.7	6,591	28.2	1,400	5.9	281	1.2	4,032	17.2	581	2.4
Tuscola	7,649	41.8	5,408	29.5	978	5.3	194	1.0	3,068	16.7	399	2.1
Van Buren	8,083	34.9	6,990	30.2	1,695	7.3	311	1.3	4,541	19.6	688	2.9
Washtenaw	26,320	28.3	22,626	24.3	6,215	6.6	1,018	1.0	22,440	24.1	11,073	11.9
Wayne	220,972	26.8	203,041	24.6	99,274	12.0	12,882	1.5	200,831	24.3	31,436	3.8
Wexford	3,086	34.3	2,849	31.7	563	6.2	75	.8	1,883	20.9	225	2.5
Total	1,053,625	32.9	894,390	27.9	257,458	8.0	39,670	1.2	672,901	21.0	129,808	4.0

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF 1, computer tape.

II. HOUSING

The U.S. Census of Housing is conducted on the occasion of the official population census. Since housing units must be located for the population count in any case, they also are counted at this time.

Each household is asked to answer several questions pertaining to its living quarters and these are the basis for the structural characteristics of housing units. Other data, such as number of housing units with Black head of household, are by-products of the population census.

Reliable interim data on housing for states and their political subdivisions are not available on a regular basis. Selected statistics for U.S. regions are published regularly by the U.S. Bureau of the Census in its Current Housing Reports series.

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TABLE II-1. GENERAL HOUSING CHARACTERISTICS: CENSUS 1980

	Michigan	United States
Total housing units	3,589,912	88,411,263
Vacant seasonal & migratory	132,890	1,641,874
Year-round housing units	3,457,022	86,769,389
Tenure and vacancy status		
Owner-occupied housing units	2,321,883	51,794,545
Percent of occupied housing units	72.7	64.4
Renter-occupied housing units	873,330	28,595,128
Vacant housing units	261,809	6,379,716
For sale only	32,191	948,469
For rent	69,008	2,178,801
Held for occasional use	69,361	1,010,804
Other vacants	91,249	2,241,642
Year householder moved into unit		
Owner-occupied housing units	2,321,883	51,794,545
1979 to March 1980	262,663	6,111,867
1975 to 1978	611,777	13,402,102
1970 to 1974	411,263	9,404,786
1960 to 1969	518,046	11,152,581
1950 to 1959	293,485	6,690,075
1949 or earlier	224,649	5,033,134
Renter-occupied housing units	873,330	28,595,128
1979 to March 1980	387,111	12,184,750
1975 to 1978	307,548	9,367,149
1970 to 1974	94,348	3,384,266
1960 to 1969	50,437	2,236,304
1959 or earlier	33,886	1,422,659

SOURCE: Bureau of the Census, *1980 Census of Population and Housing, Supplementary Report, Provisional Estimates of Social, Economic, and Housing Characteristics* (Washington, D.C.: 1982), PHC80-S1-1, Table H1.

TABLE II-2. GENERAL AND STRUCTURAL CHARACTERISTICS OF HOUSING STOCK IN LARGE MICHIGAN CITIES (75,000 AND OVER RESIDENTS), 1980

	Ann Arbor	Dearborn	Detroit	Flint	Grand Rapids	Kalamazoo	Lansing	Livonia
Total year-round housing units	40,133	35,692	471,228	60,910	69,847	30,199	51,938	33,009
percent owner-occupied	40	75	53	63	59	47	55	90
Structure age								
percent built between 1970 and March 1980	20	5	3	7	8	14	19	17
percent built between 1960 and 1969	33	6	5	16	12	14	19	35
percent built between 1950 and 1959	17	25	17	25	16	16	18	36
percent built between 1940 and 1949	9	33	29	18	15	14	13	7
percent built prior to 1940	21	32	46	35	49	42	31	5
Structure value								
median value (dollars), specified by owner	68,700	49,100	20,900	26,200	33,300	32,800	33,300	61,900
median rent (dollars), specified by renter	285	210	154	187	172	203	213	290

TABLE II-2. GENERAL AND STRUCTURAL CHARACTERISTICS OF HOUSING STOCK IN LARGE MICHIGAN CITIES (75,000 AND OVER RESIDENTS), 1980 (cont.)

	Pontiac	Saginaw	St. Clair Shores	South-field	Sterling Heights	Taylor	Warren	Westland
Total year-round housing units	27,740	28,732	27,147	31,289	34,506	25,355	54,500	23,641
percent owner occupied	52	61	84	56	80	68	80	72
Structure age								
percent built between 1970 and March 1980	13	6	9	36	53	24	13	21
percent built between 1960 and 1969	17	13	19	41	38	28	47	35
percent built between 1950 and 1959	22	16	54	14	6	33	25	29
percent built between 1940 and 1949	18	17	10	6	2	10	9	10
percent built prior to 1940	30	48	7	3	1	5	6	4
Structure value								
median value (dollars), specified by owner	25,500	25,800	46,500	67,200	66,500	37,100	47,300	45,600
median rent (dollars), specified by renter	205	174	269	368	280	247	260	266

SOURCE: Bureau of the Census, 1980 Census of Housing, General Housing Characteristics, Michigan, (Washington, D.C.: August 1982), Table 1, and 1980 Census of Housing, Detailed Housing Characteristics, Michigan, (Washington, D.C.: August 1983), Table 73.

TABLE II-3. PERCENTAGE OF MICHIGAN YEAR-ROUND HOUSING UNITS BUILT BETWEEN 1970 AND 1980, AND IN 1939 OR EARLIER, BY COUNTY: CENSUS 1980

County	Year structure built		County	Year structure built	
	1970 to March 1980	1939 or earlier		1970 to March 1980	1939 or earlier
Alcona	36.4	16.4	Lake	27.4	22.5
Alger	26.8	42.2	Lapeer	36.9	29.6
Allegan	27.7	36.2	Leelanau	36.6	27.3
Alpena	25.4	31.5	Lenawee	19.2	41.7
Antrim	35.2	32.3	Livingston	45.3	20.0
Arenac	32.5	22.6	Luce	29.6	30.0
Baraga	25.4	47.5	Mackinac	23.7	33.1
Barry	22.2	36.1	Macomb	28.0	8.5
Bay	22.0	34.4	Manistee	20.8	43.8
Benzie	32.9	34.9	Marquette	28.9	36.8
Berrien	18.8	29.9	Mason	23.1	39.0
Branch	20.4	43.2	Mecosta	33.1	25.4
Calhoun	16.1	38.2	Menominee	21.9	44.6
Cass	23.0	32.6	Midland	29.3	15.5
Charlevoix	33.7	36.6	Missaukee	31.6	35.8
Cheboygan	31.7	29.1	Monroe	26.0	29.9
Chippewa	21.5	35.6	Montcalm	24.1	39.3
Clare	33.5	15.2	Montmorency	37.2	13.9
Clinton	28.1	35.7	Muskegon	18.9	28.4
Crawford	46.4	13.1	Newaygo	27.6	30.6
Delta	24.5	45.1	Oakland	29.7	12.8
Dickinson	18.0	58.8	Oceana	26.2	38.9
Eaton	36.9	28.3	Ogemaw	30.8	15.3
Emmet	32.8	36.5	Ontonagon	17.1	48.5
Genesee	22.1	21.7	Osecola	29.6	36.4
Gladwin	35.0	13.5	Oscoda	32.3	13.9
Gogebic	12.2	64.4	Otsego	42.5	15.9
Grand Traverse	42.1	25.0	Ottawa	30.5	25.4
Gratiot	18.7	47.1	Presque Isle	26.9	33.5
Hillsdale	22.5	48.7	Roscommon	32.5	9.9
Houghton	13.1	70.0	Saginaw	23.0	28.2
Huron	19.9	40.3	St. Clair	23.5	34.0
Ingham	23.5	24.9	St. Joseph	23.9	39.4
Ionia	22.4	48.0	Sanilac	24.3	41.6
Iosco	23.8	14.1	Schoolcraft	18.9	42.4
Iron	16.7	57.6	Shiawassee	24.5	39.8
Isabella	32.1	27.6	Tuscola	28.0	37.7
Jackson	20.6	38.3	Van Buren	26.3	36.4
Kalamazoo	24.6	27.1	Washtenaw	27.0	20.5
Kalkaska	45.4	16.9	Wayne	10.0	32.2
Kent	24.0	30.9	Wexford	30.7	38.0
Keweenaw	9.9	73.3	MICHIGAN	22.1	27.6

SOURCE: Bureau of the Census, special release.

TABLE II-4. MEDIAN VALUE OF OWNER OCCUPIED HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980

County	Value		County	Value	
	1970	1980		1970	1980
Alcona	12,400	32,500	Lake	6,700	19,800
Alger	9,400	27,500	Lapeer	15,900	42,300
Allegan	12,700	36,900	Leelanau	16,300	48,600
Alpena	12,800	32,200	Lenawee	14,700	36,700
Antrim	11,500	35,000	Livingston	19,700	61,000
Arenac	9,600	32,300	Luce	9,100	26,000
Baraga	10,200	28,800	Mackinac	8,700	28,400
Barry	12,100	33,100	Macomb	22,700	50,600
Bay	15,200	35,800	Manistee	11,100	30,700
Benzie	10,700	32,100	Marquette	12,500	37,800
Berrien	15,200	33,900	Mason	11,500	29,800
Branch	12,000	30,200	Mecosta	11,200	32,200
Calhoun	13,800	30,000	Menominee	10,300	29,900
Cass	12,200	33,300	Midland	19,000	44,900
Charlevoix	11,800	34,400	Misaukee	9,200	28,200
Cheboygan	12,300	32,600	Monroe	17,600	45,700
Chippewa	8,900	25,500	Montcalm	10,300	27,400
Clare	9,900	26,300	Montmorency	10,100	29,200
Clinton	16,400	43,300	Muskegon	12,500	27,700
Crawford	12,500	31,400	Newago	10,600	28,400
Delta	11,700	33,500	Oakland	23,200	56,300
Dickinson	10,200	32,000	Oceana	12,200	28,000
Eaton	17,900	45,600	Ogemaw	11,100	27,700
Emmet	14,500	40,700	Ontonagon	9,000	20,800
Genesee	16,300	35,500	Osceola	8,800	26,200
Gladwin	10,400	29,900	Oscoda	10,100	27,400
Gogebic	6,300	17,400	Otsego	16,100	39,000
Grand Traverse	16,300	45,000	Ottawa	16,600	44,800
Gratiot	11,400	27,200	Presque Isle	12,400	37,700
Hillsdale	11,400	30,300	Roscommon	13,100	29,000
Houghton	6,400	21,400	Saginaw	16,300	36,200
Huron	11,500	31,200	St. Clair	14,600	37,800
Ingham	17,900	39,800	St. Joseph	12,200	32,400
Ionia	11,200	31,100	Sanilac	11,800	31,000
Iosco	13,400	31,300	Schoolcraft	8,700	24,700
Iron	7,700	23,800	Shiawassee	13,800	35,100
Isabella	14,500	37,500	Tuscola	12,300	35,500
Jackson	14,600	33,100	Van Buren	12,400	33,300
Kalamazoo	16,600	40,800	Washtenaw	23,300	60,800
Kalkaska	9,200	32,500	Wayne	18,100	32,600
Kent	16,000	38,900	Wexford	9,600	29,200
Keweenaw	5,000	14,400	MICHIGAN	13,600	39,000

SOURCE: Bureau of the Census, 1970 Census of Housing, Detailed Housing Characteristics, Michigan (Washington, D.C.: 1972), HC(1)-B24, Table 61 and 1980 Census of Housing Supplementary Reports Selected Housing Characteristics by States and Counties; 1980 (Washington, D.C.: 1981), HC80-S1-1, p. 150.

NOTE: Applies to all family homes on less than 10 acres with no business property.

TABLE II-5. MEDIAN CONTRACT RENT OF RENTER-OCCUPIED HOUSING UNITS IN MICHIGAN, BY COUNTY, CENSUS: 1970 AND 1980

County	Contract rent		County	Contract rent	
	1970	1980		1970	1980
Alcona	64	136	Lake	53	109
Alger	57	125	Lapeer	87	190
Allegan	77	167	Leelanau	72	183
Alpena	78	162	Lenawee	88	189
Antrim	70	167	Livingston	112	242
Arenac	63	134	Luce	57	140
Baraga	55	122	Mackinac	66	139
Barry	77	167	Macomb	143	259
Bay	86	189	Manistee	58	146
Benzie	59	152	Marquette	79	193
Berrien	88	179	Mason	68	152
Branch	73	168	Mecosta	95	159
Calhoun	88	175	Menominee	58	151
Cass	76	156	Midland	116	217
Charlevoix	81	176	Missaukee	56	152
Cheboygan	72	156	Monroe	93	199
Chippewa	69	154	Montclam	66	153
Clair	72	153	Montmorency	51	142
Clinton	88	190	Muskegon	76	159
Crawford	78	166	Newaygo	68	150
Delta	67	152	Oakland	151	286
Dickinson	65	164	Oceana	66	139
Eaton	110	227	Ogemaw	66	146
Emmet	80	186	Ontonagon	57	124
Genessee	111	208	Osceola	63	141
Gladwin	64	147	Oscoda	57	128
Gogebic	50	113	Otsego	86	181
Grand Traverse	91	219	Ottawa	82	199
Gratiot	70	157	Presque Isle	65	141
Hillsdale	73	158	Roscommon	67	152
Houghton	65	160	Saginaw	93	197
Huron	63	149	St. Clair	84	201
Ingham	125	223	St. Joseph	81	172
Ionia	74	155	Sanilac	63	155
Iosco	80	161	Schoolcraft	54	140
Iron	53	112	Shiawassee	84	178
Isabella	112	177	Tuscola	69	159
Jackson	94	188	Van Buren	74	159
Kalamazoo	111	211	Washtewaw	144	271
Kalkaska	64	172	Wayne	84	166
Kent	88	190	Wexford	70	158
Keweenaw	30	123	MICHIGAN	77	196

SOURCE: Bureau of the Census, 1970 Census of Housing, Detailed Housing Characteristics, Michigan, (Washington,D.C.: 1972), HC(1)-B24, Table 61 and 1980 Census of Housing Supplementary Reports Selected Housing Characteristics by States and Counties: 1980 (Washington, D.C.: 1981), HC80-S1-1, p 150.

NOTE: Applies to all family homes on less than 10 acres with no business property.

TABLE II-6. NUMBER AND PERCENTAGE OF YEAR ROUND HOUSING UNITS IN MICHIGAN LACKING COMPLETE PLUMBING, COMPLETE KITCHEN FACILITIES, AND COMPLETE BATHROOMS, BY COUNTY: CENSUS 1980

County	Year round housing units	Lacking complete plumbing		Lacking complete kitchen		Lacking complete bathroom	
		Number	Percent	Number	Percent	Number	Percent
Alcona	6,594	792	12.0	663	9.9	887	13.3
Alger	3,939	404	10.2	253	6.4	467	11.9
Allegan	28,960	589	2.0	498	1.7	860	2.9
Alpena	12,471	396	3.1	303	2.4	441	3.5
Antrim	8,382	272	3.2	232	2.7	359	4.2
Arenac	7,490	423	5.6	326	4.3	487	6.5
Baraga	3,385	399	11.7	275	7.9	489	14.1
Barry	17,666	445	2.5	421	2.3	666	3.7
Bay	43,170	752	1.7	633	1.4	1,052	2.4
Benzie	4,883	155	3.1	148	3.0	197	4.0
Berrien	65,416	1,170	1.7	1,269	1.9	1,468	2.2
Branch	15,919	406	2.5	395	2.4	512	3.2
Calhoun	53,945	780	1.4	751	1.3	1,201	2.2
Cass	18,584	322	1.7	355	1.9	500	2.6
Charlevoix	8,816	222	2.5	148	1.6	240	2.7
Cheboygan	9,667	316	3.2	249	2.5	402	4.1
Chippewa	12,511	571	4.5	522	4.1	653	5.2
Clare	11,399	747	6.5	617	5.3	951	8.2
Clinton	18,428	247	1.3	228	1.2	328	1.7
Crawford	5,697	444	7.7	375	6.4	543	9.3
Delta	14,928	713	4.7	571	3.8	801	5.3
Dickinson	10,245	305	2.9	235	2.2	366	3.5
Eaton	31,422	423	1.3	336	1.0	570	1.8
Emmet	10,308	415	4.0	338	3.2	476	4.5
Genesee	162,581	1,710	1.0	1,873	1.1	2,305	1.4
Gladwin	11,961	733	6.1	516	4.3	916	7.6
Gogebic	8,950	631	7.0	513	5.7	839	9.3
Grand Traverse	21,809	443	2.0	307	1.4	491	2.2
Gratiot	14,214	325	2.2	277	1.9	357	2.5
Hillsdale	16,298	577	3.5	415	2.5	744	4.5

TABLE II-6. NUMBER AND PERCENTAGE OF YEAR ROUND HOUSING UNITS IN MICHIGAN LACKING COMPLETE PLUMBING, COMPLETE KITCHEN FACILITIES, AND COMPLETE BATHROOMS, BY COUNTY: CENSUS 1980 (cont.)

County	Year round housing units	Lacking complete plumbing		Lacking complete kitchen		Lacking complete bathroom	
		Number	Percent	Number	Percent	Number	Percent
Houghton	14,501	1,270	8.7	689	4.7	1,560	10.7
Huron	15,023	437	2.9	458	3.0	698	4.6
Ingham	99,426	1,244	1.2	1,064	1.0	1,606	1.6
Ionia	17,146	337	1.9	317	1.8	460	2.6
Iosco	16,157	1,151	7.1	838	5.1	1,310	8.0
Iron	6,198	[illegible]	4.1	134	2.1	266	4.2
Isabella	17,344	410	2.3	348	2.0	503	2.8
Jackson	53,670	954	1.7	709	1.3	1,268	2.3
Kalamazoo	79,312	1,006	1.2	883	1.1	1,245	1.5
Kalkaska	4,639	234	5.0	133	2.8	215	4.6
Kent	163,451	1,781	1.0	1,787	1.0	2,304	1.4
Keweenaw	1,174	174	14.8	120	10.2	242	20.7
Lake	7,703	580	7.5	586	7.5	845	10.9
Lapeer	22,331	348	1.5	282	1.2	431	1.9
Leelanau	7,223	226	3.1	215	2.9	266	3.6
Lenawee	33,536	826	2.4	665	1.9	1,046	3.1
Livingston	33,149	357	1.0	313	.9	546	1.6
Luce	2,435	148	6.0	87	3.5	155	6.3
Mackinac	4,374	310	7.0	250	5.7	328	7.4
Macomb	236,455	1,214	.5	1,712	.7	1,720	.7
Manistee	9,831	457	4.6	344	3.4	574	5.7
Marquette	26,872	948	3.5	604	2.2	1,106	4.1
Mason	11,949	325	2.7	277	2.3	470	3.9
Mecosta	14,615	568	3.8	432	2.9	774	5.2
Menominee	10,299	402	3.9	332	3.2	498	4.8
Midland	26,098	511	1.9	442	1.6	586	2.2
Missaukee	4,056	303	7.4	219	5.3	333	8.1
Monroe	45,118	842	1.8	763	1.6	1,229	2.7
Montcalm	18,544	679	3.6	543	2.9	800	4.3
Montmorency	4,959	371	7.4	269	5.3	490	9.7

TABLE II-7. SELECTED STRUCTURAL CHARACTERISTICS OF YEAR ROUND HOUSING UNITS, BY COUNTY: CENSUS 1980

County	Year round housing units	Percent in 5 or more unit structures	Percent with outside water source	Percent with public sewer	Percent with central heat system	Percent with air condition	Percent mobile homes
Alcona	6,650	1.8	92.2	7.3	72.6	2.5	12.3
Alger	3,918	2.6	60.1	33.1	76.3	2.1	8.1
Allegan	28,985	3.6	68.8	29.6	93.0	20.8	10.3
Alpena	12,479	2.7	49.6	50.2	91.3	3.5	7.2
Antrim	8,430	3.1	70.2	15.1	76.5	4.1	8.6
Arenac	7,466	2.8	77.2	14.0	83.6	8.5	12.6
Baraga	3,451	2.1	51.5	44.4	73.3	8.7	8.6
Barry	17,749	3.8	76.6	22.3	89.6	15.7	8.1
Bay	43,116	2.6	17.5	61.9	96.6	26.9	4.9
Benzie	4,896	3.7	69.2	25.8	83.3	3.8	12.8
Berrien	65,635	3.1	43.0	63.7	96.0	42.7	3.9
Branch	15,947	3.9	62.2	35.7	92.0	19.5	10.8
Calhoun	53,967	2.5	38.8	50.7	97.2	30.4	4.2
Cass	18,657	2.9	76.5	21.2	91.0	33.7	9.0
Charlevoix	8,835	4.2	50.9	39.9	86.9	3.1	10.0
Cheboygan	9,736	3.0	75.7	21.8	83.5	3.7	10.2
Chippewa	12,517	2.4	43.4	51.2	89.0	2.2	10.3
Clare	11,475	1.7	80.2	21.3	83.5	8.5	12.7
Clinton	18,427	4.8	66.5	47.1	95.2	24.2	7.7
Crawford	5,835	1.3	84.4	16.1	81.7	4.6	12.8
Delta	14,910	2.8	46.8	50.8	90.0	3.4	7.6
Dickinson	10,307	2.3	21.3	67.5	94.3	11.1	4.3
Eaton	31,429	2.9	41.4	60.4	96.0	34.7	3.9
Emmet	10,354	5.1	53.7	44.5	88.2	3.7	8.1
Genesee	162,593	1.9	34.8	84.7	98.4	32.4	5.0
Gladwin	11,975	1.2	86.9	12.5	80.4	9.2	16.0
Gogebic	8,960	2.1	21.1	70.7	88.7	4.0	4.2
Grand Traverse	21,846	3.2	60.6	38.2	91.6	8.8	10.9
Gratiot	14,214	4.4	52.2	49.7	92.3	17.5	7.7
Hillsdale	16,342	4.4	67.2	31.0	92.5	15.7	10.6

TABLE II-7. SELECTED STRUCTURAL CHARACTERISTICS OF YEAR ROUND HOUSING UNITS, BY COUNTY: CENSUS 1980 (cont.)

County	Year round housing units	Percent in 5 or more unit structures	Percent with outside water source	Percent with public sewer	Percent with central heat system	Percent with air condition	Percent mobile homes
Houghton	14,501	3.5	24.1	63.5	88.5	3.3	5.3
Huron	15,060	5.1	62.9	29.0	92.4	12.7	6.9
Ingham	99,453	2.6	13.7	88.0	98.3	40.5	2.9
Ionia	17,175	5.1	52.4	46.0	92.4	21.1	9.9
Iosco	16,295	1.3	65.6	30.3	86.8	3.6	8.9
Iron	6,188	3.0	8.5	59.9	92.3	4.2	3.3
Isabella	17,376	3.6	55.1	45.4	92.7	22.2	11.4
Jackson	53,629	2.8	53.0	59.4	96.8	26.7	5.4
Kalamazoo	79,333	2.3	29.2	54.2	97.6	39.6	3.1
Kalkaska	4,649	2.3	86.8	13.7	81.9	4.4	20.7
Kent	163,461	2.4	20.5	79.4	97.9	32.6	3.7
Keweenaw	1,168	2.1	19.3	30.4	72.0	.5	3.1
Lake	7,721	2.3	93.7	2.3	76.2	5.4	17.6
Lapeer	22,314	3.9	72.5	25.1	91.9	16.2	6.5
Leelanu	7,221	4.9	83.8	17.8	81.3	3.9	7.1
Lenawee	33,533	3.4	52.6	50.7	96.1	28.0	5.1
Livingston	33,261	3.8	77.6	22.3	95.9	26.4	5.1
Luce	2,438	3.2	52.2	45.9	79.0	2.1	13.6
Mackinac	4,382	2.6	62.2	30.8	75.0	.7	8.4
Macomb	236,435	1.4	6.7	89.3	99.2	49.9	3.1
Manistee	9,901	3.7	59.2	35.9	87.4	5.8	7.4
Marquette	26,900	1.8	26.6	68.3	92.7	5.3	7.1
Mason	12,026	3.2	58.1	39.7	88.7	6.6	7.7
Mecosta	14,642	3.2	76.6	25.5	86.4	8.6	14.4
Menominee	10,310	3.7	53.9	46.5	92.5	11.0	6.4
Midland	26,075	3.4	41.1	54.6	93.7	29.6	8.0
Missaukee	4,083	3.5	85.8	.8	80.8	3.6	14.9
Monroe	45,124	2.8	38.7	57.6	96.6	37.7	5.9
Montcalm	18,564	3.2	68.7	29.1	88.1	14.4	10.4
Montmorency	5,014	1.9	94.3	6.9	67.0	3.4	10.0

TABLE II-7. SELECTED STRUCTURAL CHARACTERISTICS OF YEAR ROUND HOUSING UNITS, BY COUNTY: CENSUS 1980 (cont.)

County	Year round housing units	Percent in 5 or more unit structures	Percent with outside water source	Percent with public sewer	Percent with central heat system	Percent with air condition	Percent mobile homes
Muskegon	57,694	2.1	36.9	57.6	96.0	15.3	3.5
Newaygo	13,834	2.9	80.2	19.9	83.5	9.3	16.1
Oakland	371,516	2.6	18.6	80.5	99.0	53.0	2.9
Oceana	8,346	3.4	74.1	22.8	86.2	6.3	13.3
Ogemaw	12,793	1.8	92.9	8.6	81.4	3.9	14.2
Ontonagon	4,055	2.9	51.2	42.0	88.5	5.5	7.5
Osceola	8,328	4.7	75.0	23.8	82.2	5.9	12.6
Oscoda	4,695	2.4	97.0	2.8	64.4	4.8	15.2
Otsego	6,154	2.6	78.6	20.8	86.4	4.5	9.6
Ottawa	52,817	3.0	46.3	40.8	96.8	20.2	4.4
Presque Isle	5,822	3.9	65.5	27.4	84.9	3.3	7.4
Roscommon	12,948	1.8	93.4	27.7	84.3	3.7	8.9
Saginaw	79,436	2.4	18.3	75.8	96.5	31.5	3.1
St. Clair	50,221	2.6	31.5	63.1	94.9	19.7	5.8
St. Joseph	21,248	3.6	52.4	41.1	92.9	31.4	8.7
Sanilac	15,679	4.9	69.8	26.8	89.3	11.3	9.2
Schoolcraft	3,676	3.1	53.6	43.6	79.5	1.0	8.2
Shiawassee	24,398	3.8	53.1	48.7	95.6	24.1	6.1
Tuscola	19,461	4.2	68.2	29.4	91.2	17.4	9.2
Van Buren	25,468	3.5	63.9	33.6	91.4	25.1	11.4
Washtenaw	97,397	2.7	18.4	81.6	98.7	48.0	1.7
Wayne	874,718	2.1	.5	98.0	98.8	42.6	1.0
Wexford	10,682	3.1	58.6	46.0	85.8	5.9	12.1
TOTAL	3,450,696	2.5	27.4	71.3	96.1	34.2	4.3

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF3, computer tape.

TABLE II-8. SELECTED CHARACTERISTICS OF FHA-INSURED HOMES UNDER SECTION 203 IN MICHIGAN AND THE UNITED STATES: 1976-1982

	New homes		Existing homes	
Year	Michigan	United States	Michigan	United States
	Median property value (dollars)			
1976	32,324	35,278	21,439	27,011
1977	34,882	37,487	23,101	29,252
1978	39,636	41,863	22,871	33,425
1979	43,611	50,406	26,732	38,442
1980	n.a.	56,042	34,389	44,054
1981	n.a.	60,993	31,431	47,067
1982	n.a.	62,425	32,200	50,586
	Average construction cost per square foot			
1976	25.92	21.69	--	--
1977	27.80	23.39	--	--
1978	30.69	25.95	--	--
1979	35.78	29.87	--	--
1980	38.96	34.40	--	--
1981	n.a.	38.55	--	--
1982	n.a.	50.43	--	--
	Average market price of site			
1976	6,102	6,963	3,261	5,641
1977	6,169	7,279	3,438	5,878
1978	6,901	7,993	3,409	7,052
1979	7,482	9,816	3,920	8,145
1980	6,695	11,809	5,163	10,105
1981	n.a.	12,482	4,930	11,410
1982	n.a.	14,990	n.a.	15,601
	Median improved living area (square feet)			
1976	1,064	1,313	923	1,098
1977	1,043	1,294	934	1,097
1978	1,041	1,316	899	1,103
1979	1,044	1,351	921	1,111
1980	1,023	1,297	939	1,111
1981	n.a.	1,344	937	1,168
1982	n.a.	1,247	992	1,198
	Percentage with full basement			
1976	73.3	11.8	71.8	23.2
1977	84.4	11.4	73.5	23.0
1978	91.9	11.8	71.9	23.4
1979	92.4	9.6	71.3	25.4
1980	84.7	12.4	68.4	28.0
1981	n.a.	8.7	71.2	29.6
1982	n.a.	14.8	59.8	34.7

SOURCE: Federal Housing Administration, FHA Homes, 1974 through 1983 (Washington, D.C.: annually), Tables 5S, 7S, 8S, and 14S.

n.a. not available - inadequate sample.

TABLE II-9. PERCENTAGE OF TOTAL HOUSING UNITS THAT ARE SEASONAL AND MIGRATORY, CENSUS: 1970 AND 1980

County	Percentage		County	Percentage	
	1970	1980		1970	1980
Alcona	42.7	29.7	Lake	36.9	26.8
Alger	12.0	22.3	Lapeer	3.4	3.0
Allegan	10.0	9.1	Leelanau	20.1	20.4
Alpena	5.4	10.8	Lenawee	6.7	0.6
Antrim	18.2	22.2	Livingston	9.8	5.2
Arenac	26.7	2.7	Luce	19.7	31.9
Baraga	6.8	20.7	Mackinac	30.5	42.6
Barry	11.0	7.7	Macomb	0.1	0.1
Bay	1.4	0.5	Manistee	16.2	19.6
Benzie	36.7	35.0	Marquette	8.8	12.0
Berrien	7.6	4.9	Mason	10.8	9.7
Branch	8.7	11.5	Mecosta	19.3	5.8
Calhoun	0.8	0.5	Menominee	3.8	10.8
Cass	9.7	13.9	Midland	1.1	1.0
Charlevoix	17.7	20.7	Misaukee	25.1	33.7
Cheboygan	32.5	22.6	Monroe	0.2	0.5
Chippewa	16.1	23.8	Montcalm	15.0	11.2
Clare	13.6	38.5	Montmorency	28.0	37.1
Clinton	0.1	0.2	Muskegon	1.3	1.0
Crawford	41.9	23.9	Newaygo	16.9	25.6
Delta	6.6	11.7	Oakland	0.7	0.5
Dickinson	8.3	8.9	Oceana	22.3	27.2
Eaton	0.8	0.3	Ogemaw	16.3	1.2
Emmet	22.8	17.6	Ontonagon	9.9	19.6
Genesee	0.4	0.3	Osceola	17.1	16.3
Gladwin	19.4	11.4	Oscoda	37.8	36.2
Gogebic	12.6	11.5	Otsego	15.1	31.2
Grand Traverse	15.8	7.6	Ottawa	2.9	2.2
Gratiot	1.2	0.4	Presque Isle	22.0	30.5
Hillsdale	5.1	4.7	Roscommon	42.9	27.7
Houghton	10.3	12.0	Saginaw	0.3	0.1
Huron	18.2	15.8	St. Clair	2.1	3.2
Ingham	0.1	0.1	St. Joseph	7.9	5.5
Ionia	2.5	2.7	Sanilac	15.9	15.4
Iosco	22.9	10.3	Schoolcraft	16.4	26.5
Iron	11.4	19.9	Shiawassee	0.2	0.2
Isabella	2.4	4.5	Tuscola	2.1	3.1
Jackson	2.1	3.7	Van Buren	16.9	11.8
Kalamazoo	0.7	0.6	Washtenaw	1.3	0.8
Kalkaska	15.1	29.7	Wayne	0.0	0.0
Kent	1.0	1.1	Wexford	6.4	8.0
Keweenaw	44.1	45.4	TOTAL	3.7	3.9

SOURCE: Bureau of the Census, *1970 Census of Housing, Detailed Housing Characteristics, Michigan* (Washington, D.C.: 1972), HC(1)-B24, Table 60 and *1980 Census of Housing Supplementary Reports Selected Housing Characteristics by States and Counties: 1980* (Washington, D.C.: 1981), HC80-S1-1, p. 150.

TABLE II-10. PERCENTAGE OF YEAR-ROUND HOUSING UNITS THAT ARE VACANT, CENSUS: 1970 AND 1980

	Percentage			Percentage	
County	1970	1980	County	1970	1980
Alcona	33.3	43.6	Lake	52.6	60.4
Alger	24.5	16.8	Lapeer	8.8	5.0
Allegan	8.5	6.0	Leelanau	34.2	30.4
Alpena	11.4	10.6	Lenawee	6.0	10.4
Antrim	34.9	31.7	Livingston	9.0	5.4
Arenac	12.9	31.9	Luce	13.1	10.0
Baraga	18.2	13.5	Mackinac	29.6	15.9
Barry	12.4	12.6	Macomb	2.7	2.8
Bay	4.1	4.2	Mainstee	17.4	13.6
Benzie	24.8	17.9	Marquette	8.9	8.8
Berrien	7.9	7.8	Mason	22.3	18.9
Branch	11.5	12.0	Mecosta	13.0	23.8
Calhoun	4.4	5.2	Menominee	14.2	9.9
Cass	14.4	7.2	Midland	7.8	6.1
Charlevoix	20.2	20.0	Missaukee	21.1	15.5
Cheboygan	18.0	24.7	Monroe	2.9	4.4
Chippewa	15.2	20.6	Montcalm	11.2	10.8
Clare	51.7	23.8	Montmorency	48.8	43.2
Clinton	3.4	3.6	Muskegon	4.5	5.4
Crawford	15.1	41.8	Newaygo	21.7	10.9
Delta	12.2	9.1	Oakland	3.3	4.3
Dickinson	9.1	6.9	Oceana	15.2	10.6
Eaton	3.9	4.1	Ogemaw	50.4	53.6
Emmet	20.0	21.4	Ontonagon	17.3	13.1
Genesee	4.0	4.9	Osceola	17.9	21.0
Gladwin	41.0	40.1	Oscoda	48.8	46.0
Gogebic	8.4	15.3	Otsego	30.8	21.2
Grand Traverse	12.2	12.1	Ottawa	3.6	4.4
Gratiot	6.7	6.3	Presque Isle	13.8	13.8
Hillsdale	10.9	11.7	Roscommon	52.4	49.7
Houghton	12.4	10.5	Saginaw	3.8	4.2
Huron	13.8	15.0	St. Clair	10.5	5.8
Ingham	4.9	4.3	St. Joseph	7.4	6.8
Ionia	7.6	5.3	Sanilac	15.4	10.8
Iosco	31.8	37.1	Schoolcraft	20.6	16.7
Iron	19.1	12.4	Shiawassee	4.0	4.3
Isabella	7.9	7.5	Tuscola	9.8	5.8
Jackson	4.1	5.0	Van Buren	13.1	9.0
Kalamazoo	4.3	4.9	Washtenaw	4.0	4.6
Kalkaska	32.2	18.2	Wayne	4.5	5.8
Kent	5.1	26.8	Wexford	15.1	15.6
Keweenaw	17.4	29.0	TOTAL	6.8	7.3

SOURCE: Bureau of the Census, 1070 Census of Housing, Detailed Housing Characteristics, Michigan (Washington, D.C.: 1972), HC(1)-B24, Table 60 and 1980 Census of Housing Supplementary Reports Selected Housing Characteristics by States and Counties: 1980 (Washington, D.C.: 1981), HC80-S1-1, p. 150.

TABLE II-11. PERCENTAGE OF YEAR-ROUND HOUSING UNITS THAT ARE OWNER OCCUPIED, CENSUS: 1970 AND 1980

County	Percentage 1970	Percentage 1980	County	Percentage 1970	Percentage 1980
Alcona	59.7	49.3	Lake	41.1	33.5
Alger	59.6	66.4	Lapeer	73.5	78.1
Allegan	75.5	76.9	Leelanau	54.5	55.6
Alpena	73.4	72.6	Lenawee	73.3	69.7
Antrim	56.1	57.7	Livingston	74.0	78.1
Arenac	75.1	58.7	Luce	70.9	74.8
Baraga	65.0	67.8	Mackinac	56.1	67.2
Barry	74.3	73.8	Macomb	80.9	77.2
Bay	78.0	75.9	Manistee	68.3	68.7
Benzie	62.8	67.6	Marquette	59.6	58.6
Berrien	67.7	64.9	Mason	63.1	63.6
Branch	69.5	68.2	Mecosta	61.7	54.2
Calhoun	73.7	69.3	Menominee	70.8	72.6
Cass	69.9	74.5	Midland	75.4	74.0
Charlevoix	65.7	63.2	Missaukee	68.9	73.3
Cheboygan	67.9	62.0	Monroe	77.1	75.3
Chippewa	53.2	60.2	Montcalm	73.1	72.0
Clare	42.1	62.9	Montmorency	44.5	49.5
Clinton	82.2	81.3	Muskegon	75.2	71.5
Crawford	68.9	48.5	Newaygo	66.5	75.0
Delta	68.6	70.7	Oakland	75.7	71.1
Dickinson	76.2	75.6	Oceana	70.3	74.3
Eaton	77.3	70.5	Ogemaw	41.3	38.9
Emmet	63.0	59.0	Ontonagon	68.4	72.2
Genesee	74.4	71.1	Osceola	68.5	65.5
Gladwin	52.5	50.9	Oscoda	44.7	47.0
Gogebic	73.0	69.0	Otsego	58.5	64.5
Grand Traverse	68.7	66.2	Ottawa	79.9	78.7
Gratiot	73.0	73.0	Presque Isle	75.0	75.0
Hillsdale	71.2	70.4	Roscommon	40.8	43.0
Houghton	64.8	63.4	Saginaw	74.8	71.1
Huron	71.4	70.2	St. Clair	71.0	73.7
Ingham	61.2	56.0	St. Joseph	73.4	72.3
Ionia	74.7	74.4	Sanilac	70.3	74.1
Iosco	44.3	44.1	Schoolcraft	64.0	67.3
Iron	67.0	72.2	Shiawassee	77.7	77.1
Isabella	64.0	62.0	Tuscola	75.3	78.6
Jackson	75.7	71.5	Van Buren	67.4	70.1
Kalamazoo	68.4	62.4	Washtenaw	54.9	51.0
Kalkaska	58.5	69.3	Wayne	64.8	62.7
Kent	71.8	68.3	Wexford	63.5	67.1
Keweenaw	67.6	59.8	TOTAL	69.4	67.3

SOURCE: Bureau of the Census, *1970 Census of Housing, Detailed Housing Characteristics, Michigan* (Washington, D.C.: 1972), HC(1)-B24, Table 60 and *1980 Census of Housing Supplementary Reports Selected Housing Characteristics by States and Counties: 1980* (Washington, D.C.: 1981), HC80-S1-1, p. 150.

TABLE II-6. NUMBER AND PERCENTAGE OF YEAR ROUND HOUSING UNITS IN MICHIGAN LACKING COMPLETE PLUMBING, COMPLETE KITCHEN FACILITIES, AND COMPLETE BATHROOMS: CENSUS 1980 (cont.)

County	Year round housing units	Lacking complete plumbing		Lacking complete kitchen		Lacking complete bathroom	
		Number	Percent	Number	Percent	Number	Percent
Muskegon	57,671	724	1.2	645	1.1	953	1.6
Newaygo	13,615	526	3.8	390	2.8	697	5.0
Oakland	371,305	2,149	.5	2,752	.7	2,909	.7
Oceana	8,299	257	3.0	191	2.2	353	4.2
Ogemaw	12,816	1,772	13.8	1,284	10.0	1,953	15.2
Ontonagon	4,056	371	9.1	195	4.8	458	11.2
Osceola	8,305	544	6.5	442	5.3	659	7.9
Oscoda	4,660	712	15.2	586	12.4	821	17.4
Otsego	6,248	249	3.9	250	4.0	326	5.2
Ottawa	52,778	545	1.0	454	.8	739	1.3
Presque Isle	5,811	246	4.2	217	3.7	278	4.7
Roscommon	12,955	378	2.9	254	1.9	449	3.4
Saginaw	79,437	959	1.2	1,052	1.3	1,169	1.4
St. Clair	50,244	1,046	2.0	874	1.7	1,237	2.4
St. Joseph	21,249	342	1.6	346	1.6	560	2.6
Sanilac	15,650	448	2.8	369	2.3	570	3.6
Schoolcraft	3,654	255	6.9	202	5.4	285	7.7
Shiawassee	24,402	414	1.6	390	1.5	499	2.0
Tuscola	19,428	507	2.6	464	2.3	598	3.0
Van Buren	25,416	593	2.3	496	1.9	742	2.9
Washtenaw	97,431	1,525	1.5	990	1.0	1,675	1.7
Wayne	874,635	13,481	1.5	15,167	1.7	17,406	1.9
Wexford	10,644	399	3.7	366	3.4	526	4.9
TOTAL	3,448,335	63,240	1.8	58,233	1.6	80,304	2.3

SOURCE: Bureau of the Census, 1980 Population and Housing, STF3, computer tape.

TABLE II-12. PERCENTAGE OF YEAR-ROUND HOUSING UNITS THAT ARE RENTER OCCUPIED, CENSUS: 1970 AND 1980

	Percentage			Percentage	
County	1970	1980	County	1970	1980
Alcona	7.0	7.0	Lake	6.4	6.1
Alger	15.9	16.9	Lapeer	17.7	16.8
Allegan	16.1	17.1	Leelanau	11.2	13.9
Alpena	15.2	16.8	Lenawee	20.7	19.9
Antrim	8.9	11.0	Livingston	17.0	15.6
Arenac	12.0	9.4	Luce	15.9	15.2
Baraga	16.8	18.7	Mackinac	14.3	16.9
Barry	13.3	13.6	Macomb	16.4	20.0
Bay	17.9	19.9	Manistee	14.4	17.7
Benzie	12.4	14.5	Marquette	31.5	32.7
Berrien	24.4	27.2	Mason	14.7	17.5
Branch	19.1	19.8	Mecosta	25.4	21.9
Calhoun	21.9	25.4	Menominee	15.0	17.6
Cass	15.7	18.3	Midland	16.8	19.9
Charlevoix	14.1	16.8	Missaukee	10.0	11.2
Cheboygan	14.2	13.3	Monroe	20.1	20.3
Chippewa	31.6	19.1	Montcalm	15.7	17.2
Clare	6.2	13.3	Montmorency	6.7	7.3
Clinton	14.4	15.0	Muskegon	20.3	23.1
Crawford	16.0	9.6	Newaygo	11.8	14.2
Delta	19.2	20.2	Oakland	21.0	24.5
Dickinson	14.7	17.3	Oceana	14.5	15.1
Eaton	18.8	25.4	Ogemaw	8.3	7.4
Emmet	17.0	19.7	Ontonagon	14.3	14.6
Genesee	21.7	24.0	Osceola	13.6	13.5
Gladwin	6.6	8.9	Oscoda	6.5	7.1
Gogebic	18.6	15.7	Otsego	10.8	14.2
Grand Traverse	19.1	21.7	Ottawa	16.5	16.9
Gratiot	20.3	20.7	Presque Isle	11.2	11.2
Hillsdale	17.9	17.9	Roscommon	6.7	7.3
Houghton	22.8	26.0	Saginaw	21.4	24.8
Huron	14.8	14.8	St. Clair	18.5	20.5
Ingham	33.8	39.7	St. Joseph	19.2	20.6
Ionia	17.8	20.2	Sanilac	14.2	15.1
Iosco	23.9	18.8	Schoolcraft	15.4	16.1
Iron	13.9	15.4	Shiawassee	18.3	18.6
Isabella	28.1	30.5	Tuscola	14.9	15.5
Jackson	20.2	23.4	Van Buren	19.5	20.9
Kalamazoo	27.3	32.6	Washtenaw	41.1	44.4
Kalkaska	9.2	12.5	Wayne	30.7	31.6
Kent	23.2	26.8	Wexford	16.5	17.3
Keweenaw	15.0	11.2	TOTAL	23.8	25.3

SOURCE: Bureau of the Census, 1970 Census of Housing, Detailed Housing Characteristics, Michigan (Washington, D.C.: 1972), HC(1)-B24, Table 60 and 1980 Census of Housing Supplementary Reports Selected Housing Characteristics by States and Counties: 1980 (Washington, D.C.: 1981), HC80-S1-1, p. 150.

TABLE II-13. NUMBER OF HOUSING UNITS IN MICHIGAN, BY TYPE AND BY COUNTY: CENSUS 1980

County	Number of housing units	Seasonal and migratory units	Year round housing units	Owner occupied units	Renter occupied units	Vacant year round units
Alcona	9,376	2,782	6,594	3,252	463	2,879
Alger	5,067	1,128	3,939	2,614	665	660
Allegan	31,864	2,904	28,960	22,271	4,961	1,728
Alpena	13,977	1,506	12,471	9,056	2,095	1,320
Antrim	10,781	2,399	8,382	4,799	924	2,659
Arenac	7,695	205	7,490	4,398	701	2,391
Baraga	4,270	885	3,385	2,296	633	456
Barry	19,149	1,483	17,666	13,037	2,396	2,233
Bay	43,395	225	43,170	32,771	8,577	1,822
Benzie	7,509	2,626	4,883	3,299	709	875
Berrien	68,758	3,342	65,416	42,463	17,813	5,140
Branch	17,997	2,078	15,919	10,857	3,157	1,905
Calhoun	54,234	289	53,945	37,395	13,728	2,822
Cass	21,583	2,999	18,584	13,841	3,395	1,348
Charlevoix	11,117	2,301	8,816	5,574	1,482	1,760
Cheboygan	12,488	2,821	9,667	5,994	1,283	2,390
Chippewa	16,411	3,900	12,511	7,537	2,394	2,580
Clare	18,544	7,145	11,399	7,166	1,520	2,713
Clinton	18,468	40	18,428	14,987	2,768	673
Crawford	7,489	1,792	5,697	2,765	550	2,382
Delta	16,905	1,977	14,928	10,555	3,013	1,360
Dickinson	11,250	1,005	10,245	7,761	1,775	709
Eaton	31,522	100	31,422	22,168	7,969	1,285
Emmet	12,506	2,198	10,308	6,077	2,030	2,201
Genesee	162,989	408	162,581	115,594	39,047	7,940
Gladwin	13,509	1,548	11,961	6,089	1,070	4,802
Gogebic	10,112	1,162	8,950	6,174	1,404	1,372
Grand Traverse	23,613	1,804	21,809	14,437	4,730	2,642
Gratiot	14,278	64	14,214	10,375	2,944	895
Hillsdale	17,095	797	16,298	11,467	2,916	1,915

TABLE II-13. NUMBER OF HOUSING UNITS IN MICHIGAN, BY TYPE AND BY COUNTY: CENSUS 1980 (cont.)

County	Number of housing units	Seasonal and migratory units	Year round housing units	Owner occupied units	Renter occupied units	Vacant year round units
Houghton	16,470	1,969	14,501	9,198	3,777	1,526
Huron	17,852	2,829	15,023	10,540	2,224	2,259
Ingham	99,517	91	99,426	55,719	39,460	4,247
Ionia	17,612	466	17,146	12,763	3,467	916
Iosco	18,006	1,849	16,157	7,130	3,032	5,995
Iron	7,739	1,541	6,198	4,473	957	768
Isabella	18,167	823	17,344	10,752	5,292	1,300
Jackson	55,740	2,070	53,670	38,396	12,578	2,696
Kalamazoo	79,813	501	79,312	49,511	25,894	3,907
Kalkaska	7,596	2,957	4,639	3,213	582	844
Kent	162,282	1,831	163,451	111,706	43,892	7,853
Keweenaw	2,149	975	1,174	702	131	341
Lake	10,518	2,815	7,703	2,582	468	4,653
Lapeer	23,026	695	22,331	174,441	3,761	1,129
Leelanau	9,073	1,850	7,223	4,019	1,004	2,200
Lenawee	33,750	214	33,536	23,374	6,670	3,492
Livingston	34,951	1,802	33,149	26,180	5,164	1,805
Luce	3,574	1,139	2,435	1,822	370	243
Mackinac	7,624	3,250	4,374	2,941	739	694
Macomb	236,602	147	236,455	182,464	47,356	6,635
Manistee	12,235	2,404	9,831	6,752	1,738	1,341
Marquette	30,530	3,658	26,872	15,738	8,776	2,358
Mason	13,228	1,279	11,949	7,601	2,092	2,256
Mecosta	15,516	901	14,615	7,928	3,206	3,481
Menominee	11,545	1,246	10,299	7,472	1,811	1,016
Midland	26,355	257	26,098	19,303	5,195	1,600
Missaukee	6,116	2,060	4,056	2,974	453	629
Monroe	45,361	243	45,118	33,963	9,147	2,008
Montcalm	20,886	2,342	18,544	13,360	3,183	2,001
Montmorency	7,886	2,927	4,959	2,453	361	2,145

TABLE II-14. TYPE OF FUEL USED IN HOME HEATING IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

County	Occupied housing units	Utility gas	Bottled tank, or LP gas	Electricity	Fuel oil kerosene etc.	Coal or coke	Wood	Other fuel	No fuel used
Muskegon	54,526	44,827	1,763	1,687	5,053	34	1,089	62	11
Newaygo	12,134	3,447	2,547	389	4,199	36	1,500	10	6
Oakland	355,187	305,621	3,428	15,045	29,405	85	1,173	283	147
Oceana	7,418	2,360	1,278	311	2,678	4	774	2	11
Ogemaw	5,940	1,191	1,636	458	1,841	10	781	18	5
Ontonagon	3,524	777	323	214	1,876	4	330	0	0
Osceola	6,558	2,257	1,066	291	2,051	16	864	7	6
Oscoda	2,517	19	763	191	762	0	773	2	7
Otsego	4,921	1,853	835	434	1,291	3	503	2	0
Ottawa	50,449	38,809	1,253	1,374	7,776	93	1,062	59	23
Presque Isle	5,008	1,351	1,058	76	1,906	10	605	0	2
Roscommon	6,519	3,292	1,101	653	713	0	749	11	0
Saginaw	76,116	57,915	2,419	4,161	10,268	135	1,107	82	29
St. Clair	47,308	32,054	2,693	3,061	7,951	120	1,358	65	6
St. Joseph	19,794	10,441	2,057	1,740	4,474	32	1,020	15	15
Sanilac	13,959	4,872	2,055	1,089	4,970	57	901	5	10
Schoolcraft	3,045	886	423	382	937	0	417	0	0
Shiawassee	23,359	13,611	1,331	1,147	6,499	37	707	18	9
Tuscola	18,290	7,272	3,011	1,063	5,810	69	1,046	13	6
Van Buren	23,121	9,852	2,563	2,370	7,038	30	1,195	46	27
Washtenaw	92,937	72,366	2,262	6,028	11,240	65	557	382	37
Wayne	824,169	767,274	5,990	25,618	20,031	1,783	446	2,570	457
Wexford	8,983	4,914	726	467	1,889	4	977	6	0
Michigan	3,195,213	2,430,003	125,609	149,262	409,969	6,224	66,732	6,046	1,368

SOURCE: Bureau of the Census, tapes.

TABLE II-13. NUMBER OF HOUSING UNITS IN MICHIGAN, BY TYPE AND BY COUNTY: CENSUS 1980 (cont.)

County	Number of housing units	Seasonal and migratory units	Year round housing units	Owner occupied units	Renter occupied units	Vacant year round units
Muskegon	58,241	570	57,671	41,207	13,319	3,145
Newaygo	18,306	4,691	13,615	10,198	1,936	1,481
Oakland	373,250	1,945	371,305	264,138	91,049	16,118
Oceana	11,394	3,095	8,299	6,166	1,252	881
Ogemaw	12,977	161	12,816	4,991	949	6,876
Ontonagon	5,042	986	4,056	2,930	594	532
Osceola	9,927	1,622	8,305	5,440	1,118	1,747
Oscoda	7,308	2,648	4,660	2,188	329	2,143
Otsego	9,078	2,830	6,248	4,033	888	1,327
Ottawa	53,960	1,182	52,778	41,520	8,929	2,329
Presque Isle	8,361	2,550	5,811	4,356	652	803
Roscommon	17,925	4,970	12,955	5,577	942	6,436
Saginaw	79,543	106	79,437	56,446	19,670	3,321
St. Clair	51,903	1,659	50,244	37,009	10,299	2,936
St. Joseph	22,479	1,230	21,249	15,419	4,375	1,455
Sanilac	18,492	2,842	15,650	11,597	2,362	1,691
Schoolcraft	4,974	1,320	3,654	2,458	587	609
Shiawassee	24,464	62	24,402	18,807	4,552	1,043
Tuscola	20,052	624	19,428	15,275	3,015	1,138
Van Buren	28,801	3,385	25,416	17,808	5,313	2,295
Washtenaw	98,172	741	97,431	49,708	43,229	4,494
Wayne	875,018	383	874,635	547,933	276,236	50,466
Wexford	11,575	931	10,644	7,140	1,843	1,661
TOTAL	3,589,912	141,577	3,448,335	2,321,883	873,330	253,122

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF1, computer tape.

TABLE II-14. TYPE OF FUEL USED IN HOME HEATING IN MICHIGAN, BY COUNTY: CENSUS 1980

County	Occupied housing units	Utility gas	Bottled tank, or LP gas	Electricity	Fuel oil kerosene etc.	Coal or coke	Wood	Other fuel	No fuel used
Alcona	3,715	979	681	174	1,292	0	585	2	2
Alger	3,279	1,561	359	135	717	0	507	0	0
Allegan	27,232	13,454	2,157	831	9,920	80	1,359	48	13
Alpena	11,151	6,481	743	269	2,925	10	716	7	0
Antrim	5,723	1,816	962	433	1,557	0	951	0	4
Arenac	5,099	1,597	726	221	1,947	6	594	5	3
Baraga	2,929	1,113	455	104	751	0	498	8	0
Barry	15,433	6,089	1,853	696	5,495	43	1,236	20	1
Bay	41,348	32,676	1,378	1,541	4,886	74	691	83	19
Benzie	4,008	1,301	607	233	1,305	0	563	5	4
Berrien	60,276	35,315	1,195	9,902	12,586	114	1,053	68	43
Branch	14,014	6,604	1,650	656	4,277	40	747	32	8
Calhoun	51,123	35,394	1,643	2,211	10,991	49	764	62	9
Cass	17,236	7,432	1,770	2,428	4,465	34	1,085	4	18
Charlevoix	7,056	3,569	886	252	1,531	0	818	0	0
Cheboygan	7,277	3,023	1,272	444	1,408	9	1,118	3	0
Chippewa	9,931	4,171	901	651	3,430	2	740	26	10
Clare	8,686	2,978	2,285	636	1,838	10	936	0	3
Clinton	17,755	9,765	873	792	5,704	21	592	4	4
Crawford	3,315	1,233	1,014	225	400	0	440	3	0
Delta	13,568	7,663	1,206	744	3,144	6	798	2	5
Dickinson	9,536	6,249	433	389	2,261	0	196	8	0
Eaton	30,137	19,614	1,187	1,988	6,445	36	804	47	16
Emmet	8,107	4,055	1,052	295	1,905	9	768	13	10
Genesee	154,641	127,831	2,870	6,780	16,074	91	744	188	63
Gladwin	7,159	1,966	1,668	467	1,990	0	1,062	0	6
Gogebic	7,578	2,893	445	136	3,697	11	339	57	0
Grand Traverse	19,167	12,269	1,171	748	3,811	18	1,132	3	15
Gratiot	13,319	7,654	1,239	742	2,977	17	681	1	8
Hillsdale	14,383	5,857	2,594	664	4,367	69	817	13	2

TABLE II-14. TYPE OF FUEL USED IN HOME HEATING IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

County	Occupied housing units	Utility gas	Bottled tank, or LP gas	Electricity	Fuel oil kerosene etc.	Coal or coke	Wood	Other fuel	No fuel used
Houghton	12,975	5,026	915	918	5,100	28	983	3	2
Huron	12,764	5,723	1,454	724	4,348	45	459	9	2
Ingham	95,179	72,366	1,605	7,588	10,521	1,747	779	555	18
Ionia	16,230	8,607	1,374	618	4,637	51	922	17	4
Iosco	10,162	5,225	1,012	398	2,653	3	850	9	12
Iron	5,430	3,405	376	309	1,107	2	229	0	2
Isabella	16,044	9,289	2,137	1,191	2,581	8	781	42	15
Jackson	50,974	36,170	2,658	2,413	8,586	49	1,002	71	25
Kalamazoo	75,405	54,375	1,057	3,760	14,611	305	1,067	186	44
Kalkaska	3,795	853	1,237	187	927	3	585	0	3
Kent	155,598	133,351	3,332	3,285	13,694	78	1,556	270	32
Keweenaw	833	0	89	43	610	0	91	0	0
Lake	3,050	85	1,027	100	1,163	6	658	6	5
Lapeer	21,202	9,020	2,084	1,636	7,077	21	1,341	12	11
Leelanau	5,023	1,014	664	392	2,143	0	804	0	6
Lenawee	30,044	16,461	3,189	1,067	8,658	80	553	31	5
Livingston	31,344	18,647	2,164	2,531	7,059	34	883	24	2
Luce	2,192	722	405	90	655	0	316	2	2
Mackinac	3,680	800	549	459	1,153	0	714	5	0
Macomb	229,820	205,588	1,595	9,105	12,625	88	511	269	39
Manistee	8,490	3,758	811	433	2,694	16	768	3	7
Marquette	24,514	11,003	1,684	2,363	8,330	19	1,108	7	0
Mason	9,693	4,923	1,421	334	2,200	21	773	14	7
Mecosta	11,134	5,293	1,966	667	2,213	0	974	19	2
Menominee	9,283	5,234	1,029	288	2,312	19	373	28	0
Midland	24,498	16,124	1,839	933	4,430	30	1,095	28	19
Missaukee	3,427	896	552	199	1,270	2	507	1	0
Monroe	43,110	27,896	4,390	2,393	7,571	150	651	46	13
Montcalm	16,543	8,250	2,217	681	3,881	43	1,441	19	11
Montmorency	2,814	36	921	131	1,036	0	690	0	0

III. HEALTH AND VITAL STATISTICS

Michigan Heath Statistics, published annually by the Office of Vital and Health Statistics, Michigan Department of Public Health, is the major source of statistics presented here. Births and deaths are estimated on the basis of registrations, which are not complete. In 1950, a test done in connection with the Census of Population revealed that registration of births in Michigan was 98.7 percent complete. The Office of Vital and Health Statistics believes that death registrations exceed birth registrations because a death certificate is required for the issuance of a burial permit. However, delayed registration of births and deaths cause negligible statistical aberrations.

Since 1950 births and deaths among nonresidents, but taking place in Michigan, have been excluded from the state data; births and deaths among Michigan residents taking place in other states or countries are included. Intrastate allocation of births and deaths is on the basis of county of residence. An effort is made to determine the city of residence, but for a large number of births and deaths in each county it is impossible to determine this jurisdiction from the registration form. Live birth and death statistics for counties appear in Table III-16; some related statistics, used in determining net migration for counties, appear in Table I-5.

Revisions in the International Classification of Diseases affect the comparability of cause-specific mortality data over time. The ninth revision has been the basis for cause of death classification in Michigan since 1979.

Annual information about registered hospitals is published in Hospitals, Journal of the American Hospital Association. Michigan Department of Public Health compilations exclude federal hospitals and hospitals licensed by the Michigan Department of Mental Health. The latter has jurisdiction over state hospitals for the mentally ill as well as state homes and training schools for the mentally retarded.

Those with a special interest in the death rate from motor vehicle accidents should consult chapter XVII.

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TABLE III-1. LIVE BIRTHS AND DEATHS OF MICHIGAN AND U.S. RESIDENTS: 1950-1982

	Michigan		United States	
Year	Live births	Deaths	Live Births	Deaths
1950	160,055	57,567	3,632,000	1,452,454
1951	172,451	59,181	3,820,000	1,482,099
1952	177,835	59,138	3,909,000	1,496,838
1953	182,968	62,087	3,959,000	1,517,541
1954	192,104	60,706	4,071,000	1,481,091
1955	196,294	63,087	4,097,000	1,528,717
1956	206,068	64,352	4,210,000	1,564,476
1957	208,488	66,435	4,300,000	1,633,128
1958	202,690	65,899	4,246,000	1,647,886
1959	198,301	66,812	4,286,000	1,656,814
1960	195,056	67,912	4,257,850	1,711,982
1961	192,825	67,375	4,268,326	1,701,522
1962	182,790	70,049	4,167,362	1,756,720
1963	178,871	72,438	4,098,020	1,813,549
1964	175,103	72,129	4,027,490	1,798,051
1965	166,464	73,665	3,760,358	1,828,136
1966	165,794	74,596	3,606,274	1,863,149
1967	162,756	75,360	3,520,959	1,851,323
1968	159,058	76,855	3,501,564	1,930,082
1969	165,760	76,693	3,600,206	1,921,990
1970	171,667	76,321	3,731,386	1,921,031
1971	162,244	77,395	3,555,970	1,927,542
1972	146,854	79,210	3,258,411	1,963,944
1973	141,550	78,522	3,136,965	1,973,003
1974	137,414	76,143	3,159,958	1,934,388
1975	133,931	74,522	3,144,198	1,892,879
1976	131,378	75,801	3,167,788	1,909,440
1977	138,416	74,144	3,326,632	1,899,597
1978	138,802	74,773	3,333,279	1,927,788
1979	144,452	73,480	3,494,398	1,913,841
1980	145,162	74,991	3,612,258	1,989,841
1981	140,579	75,818	3,629,238	1,987,000[p]
1982	137,950	75,536	3,704,000[p]	1,986,000[p]

SOURCE: Michigan Department of Public Health, *Michigan Health Statistics, 1981* (Lansing: 1983), and special release; and National Center for Health Statistics, *Vital Statistics of the United States 1978* (Hyattsville, MD: 1982) and *Monthly Vital Statistics Report* (Hyattsville, MD: monthly).

p: provisional

TABLE III-2. LIVE BIRTH AND DEATH RATES PER 1,000 POPULATION OF MICHIGAN AND U.S. RESIDENTS: 1950-1982

Year	Michigan		United States	
	Live births	Deaths	Live births	Deaths
1950	25.1	9.0	24.1	9.6
1951	26.3	9.0	24.9	9.7
1952	26.5	8.8	25.1	9.6
1953	26.7	9.1	25.1	9.6
1954	27.3	8.6	25.3	9.2
1955	27.1	8.7	25.0	9.3
1956	27.4	8.6	25.2	9.4
1957	26.7	8.5	25.3	9.6
1958	25.8	8.4	24.5	9.5
1959	24.9	8.4	24.2	9.4
1960	24.9	8.7	23.7	9.5
1961	24.4	8.5	23.3	9.3
1962	23.0	8.8	22.4	9.5
1963	22.3	9.0	21.7	9.6
1964	21.6	8.9	21.1	9.4
1965	20.3	9.0	19.4	9.4
1966	19.9	9.0	18.4	9.5
1967	18.9	8.7	17.8	9.4
1968	18.3	8.9	17.6	9.7
1969	19.0	8.8	17.9	9.5
1970	19.3	8.6	18.4	9.5
1971	18.1	8.6	17.2	9.3
1972	16.3	8.8	15.6	9.4
1973	15.6	8.7	14.8	9.3
1974	15.1	8.4	14.8	9.1
1975	14.7	8.2	14.6	8.8
1976	14.4	8.3	14.6	8.8
1977	15.1	8.1	15.1	8.6
1978	15.1	8.1	15.0	8.7
1979	15.6	7.9	15.6	8.5
1980	15.7	8.1	15.9	8.9
1981	15.2	8.2	15.8	8.7p
1982	15.0	8.2	16.0p	8.6p

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1981 (Lansing: 1983), and special release; and National Center for Health Statistics, Vital Statistics of the United States 1978 (Hyattsville, MD: 1982) and Monthly Vital Statistics Report (Hyattsville, MD: monthly).

p: provisional.

TABLE III-3. FERTILITY RATES, MICHIGAN AND THE UNITED STATES, SELECTED YEARS: 1940-1982

Year	Michigan	United States
1940	78.9	79.9
1950	110.5	106.2
1960	123.1	118.0
1970	91.7	87.9
1971	84.5	81.6
1972	75.1	73.1
1973	71.2	68.8
1974	68.0	67.8
1975	65.5	66.0
1976	63.5	65.0
1977	65.9	66.5
1978	65.0	65.5
1979	66.6	67.2
1980	66.3	68.4
1981	63.2	67.4
1982	61.7	67.8[p]

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1981 (Lansing: 1983), Table 1.3; and Michigan Department of Public Health, special release; and National Center for Health Statistics, Vital Statistics of the United States 1978 (Hyattsville, Maryland: 1982) and Monthly Vital Statistics Report (Hyattsville, Maryland: monthly).
p.: provisional

TABLE III-4. LIVE BIRTHS BY RACE, MICHIGAN RESIDENTS: 1968-1982

	White		Black and other minority races[a]		
Year	Number	Percentage of total births	Number	Percentage of total births	Total
1968	135,436	85.1	23,622	14.9	159,058
1969	140,222	84.6	25,538	15.4	165,760
1970	143,871	83.8	27,796	16.2	171,667
1971	134,165	82.7	28,079	17.3	162,244
1972	119,787	81.6	27,067	18.4	146,854
1973	114,878	81.2	26,672	18.8	141,550
1974	112,474	81.9	24,940	18.1	137,414
1975	109,718	81.9	24,213	18.1	133,931
1976	107,907	82.1	23,471	17.9	131,378
1977	114,042	82.4	24,374	17.6	138,416
1978	114,217	82.3	24,585	17.7	138,802
1979	118,671	82.2	25,781	17.8	144,452
1980	119,103	82.0	26,059	18.0	145,162
1981	115,972	82.5	24,607	17.5	140,579
1982	113,868	82.5	24,082	17.5	137,950

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1981 (Lansing: 1983), Table 1.4; and Michigan Department of Public Health, special release.
a. Indians from India were counted as "white" from 1970-1977, and with "other" from 1978-1982. Includes race not stated.

TABLE III-5. LIVE BIRTHS, BY LIVE BIRTH ORDER, MICHIGAN RESIDENTS, 1972 AND 1982

Live birth order	No. of births		Percentage of total	
	1972	1982	1972	1982
First birth	57,477	56,879	39.1	41.2
Second birth	43,057	45,701	29.3	33.1
Third birth	22,677	21,949	15.4	15.9
Fourth birth	11,405	7,968	7.8	5.8
Fifth birth or greater	12,136	4,774	8.3	3.5
Not stated	102	679	0.1	0.5
TOTAL	146,854	137,950	100.0	100.0

SOURCE: Michigan Department of Public Health, special release.

TABLE III-6. FIRST BIRTHS, MICHIGAN AND U.S. RESIDENTS: 1970-1982

Year	Michigan		United States	
	First births	Percentage of all births	First births	Percentage of all births
1970	64,222	37.4	1,430,680	38.3
1971	60,413	37.2	1,375,668	38.7
1972	57,477	39.1	1,289,257	39.6
1973	57,411	40.6	1,243,358	39.6
1974	56,233	40.9	1,314,194	41.6
1975	55,348	41.3	1,319,126	42.0
1976	54,003	41.1	1,324,811	41.8
1977	56,622	40.9	1,387,143	41.7
1978	57,767	41.6	1,401,491	42.0
1979	60,424	41.8	1,479,260	42.3
1980	61,516	42.4	1,545,604	42.8
1981	59,105	42.0	1,553,665	n.a.
1982	56,879	41.2	n.a.	n.a.

SOURCE: Michigan Department of Public Health, *Michigan Health Statistics, 1981* (Lansing: 1983), Table 1.9; and Michigan Department of Public Health, special release.

n.a.: not available.

TABLE III-7. LIVE BIRTH AND LIVE BIRTH RATES, BY AGE OF MOTHER, MICHIGAN RESIDENTS: 1968-1982

Year	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45 and older[a]	Total fertility rate[b]
					Number				
1968	400	26,390	60,072	41,561	18,613	9,095	2,739	163	
1969	421	28,061	63,376	44,615	18,535	8,157	2,433	134	
1970	489	29,764	65,892	46,262	19,003	7,904	2,223	118	
1971	472	28,480	62,367	43,639	18,258	6,975	1,926	113	
1972	503	28,108	54,199	40,442	16,133	5,805	1,555	95	
1973	569	27,808	51,284	39,845	15,520	5,163	1,277	62	
1974	501	25,977	49,975	40,215	15,317	4,291	1,063	50	
1975	463	24,509	48,675	40,061	14,891	4,273	982	54	
1976	404	22,593	47,161	41,412	14,893	4,053	799	47	
1977	426	22,585	49,740	43,346	17,293	4,178	771	51	
1978	345	21,487	49,498	43,744	18,367	4,562	729	50	
1979	355	21,239	51,319	46,084	19,962	4,720	715	41	
1980	331	20,000	51,218	47,113	21,024	4,692	740	22	
1981	300	18,397	47,737	46,527	22,178	4,701	695	34	
1982	319	17,344	45,586	45,995	22,564	5,395	711	29	
					Live Birth Rates per 1,000 Women				
1968	0.9	64.3	171.5	143.2	73.4	36.3	10.2	0.6	2,502.0
1969	0.9	66.0	174.2	150.8	73.8	33.1	9.1	0.5	2,542.0
1970	1.0	68.2	176.2	154.2	76.2	32.4	8.3	0.4	2,584.5
1971	1.0	64.7	161.7	138.6	69.1	27.9	7.2	0.4	2,353.0
1972	1.1	63.7	137.6	124.1	58.6	22.8	5.9	0.4	2,071.0
1973	1.2	62.8	127.5	118.3	54.2	19.9	4.9	0.2	1,945.0
1974	1.1	58.5	121.9	115.7	51.5	16.3	4.1	0.2	1,846.5
1975	1.1	55.3	117.0	112.3	48.4	16.0	3.9	0.2	1,771.0
1976	0.9	51.1	111.6	113.0	46.9	15.0	3.2	0.2	1,709.5
1977	1.0	50.9	115.5	114.9	52.6	15.2	3.1	0.2	1,767.0
1978	0.8	48.3	112.7	112.6	54.0	16.3	3.0	0.2	1,739.5
1979	0.9	47.6	114.6	115.2	56.7	16.6	3.0	0.2	1,774.0
1980	0.8	44.8	113.1	115.6	58.4	16.4	3.1	0.1	1,761.5
1981	0.8	42.7	105.4	112.1	58.0	15.9	2.9	0.2	1,690.0
1982	0.9	39.2	98.0	107.6	59.2	18.4	3.1	0.1	1,632.5

SOURCE: Michigan Department of Public Health, special release.

NOTE: Live birth rates are per 1,000 women in specified age group.

a. Rate calculated as number of live births to women aged 45 and over per 1,000 women 45-49 years of age.

b. Total fertility rate is total children to 1,000 women in their lifetime assuming constant live birth rates.

TABLE III-8. INFANT, NEONATAL, POSTNEONATAL, PERINATAL, FETAL, AND MATERNAL DEATHS, MICHIGAN RESIDENTS: 1950-1982

Year	Under 1 year	Under 28 days	28-364 days	Perinatal	Fetal	Maternal
1950	4,214	3,043	1,171	5,781	3,095	91
1951	4,505	3,296	1,209	6,088	3,158	94
1952	4,689	3,414	1,275	6,266	3,224	82
1953	4,728	3,369	1,339	6,188	3,180	79
1954	4,795	3,560	1,235	6,415	3,249	94
1955	4,873	3,707	1,166	6,381	3,029	61
1956	5,047	3,796	1,251	6,655	3,245	84
1957	5,093	3,884	1,209	6,668	3,154	79
1958	4,980	3,789	1,191	6,516	3,101	69
1959	4,846	3,674	1,172	6,250	2,928	72
1960	4,702	3,580	1,122	6,247	3,008	75
1961	4,604	3,475	1,129	5,875	2,735	78
1962	4,367	3,251	1,116	5,669	2,703	56
1963	4,150	3,109	1,041	5,407	2,540	71
1964	4,043	3,071	972	5,293	2,466	62
1965	3,936	2,909	1,027	5,139	2,475	54
1966	3,751	2,830	921	4,909	2,295	54
1967	3,595	2,714	881	4,693	2,195	52
1968	3,438	2,617	821	4,476	2,064	44
1969	3,356	2,550	806	4,488	2,175	27
1970	3,492	2,683	809	4,522	2,060	29
1971	3,157	2,412	745	4,139	1,923	32
1972	2,801	2,115	686	3,700	1,770	35
1973	2,561	1,902	659	3,392	1,682	26
1974	2,387	1,734	653	2,947	1,438	19
1975	2,205	1,563	642	2,673	1,356	16
1976	1,978	1,424	554	2,495	1,264	14
1977	1,945	1,367	578	2,452	1,284	11
1978	1,931	1,281	650	2,302	1,201	15
1979	1,921	1,295	626	2,285	1,175	11
1980	1,851	1,284	567	2,235	1,135	16
1981	1,851	1,281	570	2,151	1,040	7
1982	1,672	1,202	470	1,988	953	11

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1981 (Lansing: 1983), Table 4.1, and special release.

TABLE III-9. NUMBER OF DEATHS BY SIX LEADING CAUSES AMONG MICHIGAN RESIDENTS: 1950-1982

Year	Heart disease	Cancer (all forms)	Cerebro-vascular disease	Accidents		Diabetes	Pneumonia and Influenza
				Motor vehicle	All forms		
1950	20,521	8,685	6,376	1,680	3,783	1,438	1,481
1951	21,118	9,187	6,579	1,806	3,916	1,374	1,892
1952	21,247	9,256	6,521	1,815	3,901	1,339	1,693
1953	22,425	9,904	7,045	2,051	4,375	1,419	1,777
1954	22,362	10,105	6,964	1,916	3,948	1,469	1,437
1955	23,440	10,297	7,362	2,129	4,213	1,415	1,599
1956	24,661	10,489	7,114	1,826	3,925	1,443	1,779
1957	25,369	10,810	7,632	1,680	3,643	1,510	2,237
1958	25,215	10,946	7,547	1,466	3,306	1,595	2,209
1959	25,323	11,113	7,700	1,587	3,666	1,715	1,920
1960	25,728	11,331	7,682	1,710	3,688	1,784	2,224
1961	25,519	11,476	7,745	1,656	3,692	1,778	1,762
1962	27,226	11,752	7,783	1,668	3,758	1,908	1,954
1963	27,483	12,078	8,168	2,005	4,033	2,049	2,229
1964	27,496	12,087	7,940	2,286	4,416	2,055	1,754
1965	28,134	12,419	7,769	2,271	4,494	2,153	2,086
1966	28,277	12,506	7,732	2,407	4,737	2,243	2,085
1967	28,757	13,030	7,846	2,265	4,519	2,182	2,051
1968	29,680	13,292	7,913	2,466	4,603	2,298	2,577
1969	29,396	13,328	7,706	2,579	4,766	2,188	2,439
1970	29,204	13,551	7,691	2,309	4,428	2,180	2,101
1971	30,095	13,594	7,826	2,274	4,426	2,103	2,058
1972	30,865	14,045	7,999	2,450	4,566	2,222	2,201
1973	29,944	14,220	7,987	2,389	4,630	2,074	2,090
1974	29,220	14,241	7,645	1,929	4,211	1,940	1,698
1975	28,298	14,445	7,262	1,841	4,002	1,819	1,825
1976	29,233	14,880	7,354	1,993	3,912	1,719	2,106
1977	28,895	15,125	6,818	1,993	3,945	1,615	1,660
1978	29,406	15,249	6,520	2,138	3,970	1,551	2,003
1979	29,296	15,409	6,067	1,967	3,839	1,449	1,475
1980	29,790	15,828	6,164	1,880	3,627	1,467	1,808
1981	30,172	16,142	6,121	1,727	3,390	1,487	1,716
1982	30,099	16,566	5,839	1,555	3,113	1,347	1,701

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1981 (Lansing: 1983), Table 4.8; and special release.

TABLE III-10. NUMBER OF DEATHS AMONG MICHIGAN RESIDENTS, BY SIXTEEN LEADING CAUSES[1], BY SEX AND AGE GROUP: 1982

Cause	Sex			Age group					
	Male	Female	Total	Under 1 year	1-19 years	20-44 years	45-64 years	65 and over	Not stated
Diseases of heart	16,137	13,960	30,099	24	35	664	5,928	23,447	1
Cancer	8,970	7,596	16,566	3	126	804	5,569	10,064	--
Cerebrovascular	2,474	3,365	5,839	6	7	142	693	4,991	--
Accident & adverse effects	2,135	978	3,113	40	598	1,162	589	724	--
Chronic obstructive pulmonary diseases and allied conditions[2]	1,464	840	2,205	--	13	37	438	1,717	--
Pneumonia and Influenza	910	791	1,701	15	17	66	205	1,397	1
Diabetes Mellitus	558	789	1,347	--	3	76	310	958	--
Atherosclerosis	487	797	1,284	--	--	1	43	1,240	--
Chronic Liver disease and cirrhosis	813	431	1,244	3	--	202	627	412	--
Suicide	843	260	1,103	--	86	556	293	168	--
Certain conditions originating in the perinatal period	573	391	965	958	4	1	--	2	--
Homicide & legal intervention	706	230	936	3	116	607	149	60	1
Nephritis, nephrotic syndrome, & nephrosis	372	337	709	15	6	37	101	550	--
Congenital anomalies	255	230	488	319	71	49	21	28	--
Septicemia	203	225	428	3	1	24	94	306	--
Hypertension with or without renal disease	115	159	274	--	--	4	42	228	--
All other causes	3,755	3,480	7,235	283	192	770	1,335	4,655	--
TOTAL	40,770	34,759	75,536	1,672	1,275	5,202	16,437	50,947	3

SOURCE: Michigan Department of Public Health, special release.

1. Cause of death ranking is based on the list of 72 Selected Causes of Death used by the National Center for Health Statistics beginning in 1979.
2. Includes bronchitis, emphysema, asthma, and other chronic obstructive pulmonary diseases and allied conditions.
3. Male and female deaths do not add to total due to seven deaths with sex unknown.

TABLE III-11. DEATH RATES AMONG MICHIGAN RESIDENTS, BY AGE AND SEX[1]: 1981 AND 1982

Age	1981 Male	1981 Female	1981 Total	1982 Male	1982 Female	1982 Total
All ages	910.2	730.1	817.9	907.2	734.5	818.6
Under 1 year	1,450.2	1,175.6	1,315.6	1,370.8	1,003.7	1,190.8
1-14 years	42.5	31.0	36.8	40.1	28.1	34.2
15-24 years	131.6	46.0	88.7	117.0	45.9	81.6
25-24 years	184.1	77.0	129.9	178.8	76.2	126.8
35-44 years	291.2	158.6	223.6	293.6	160.2	225.7
45-54 years	731.4	423.7	573.1	720.7	397.3	554.3
55-64 years	1,771.7	959.7	1,344.8	1,708.2	936.1	1,299.8
65-74 years	4,134.6	2,218.9	3,062.3	4,185.9	2,249.4	3,094.7
75-84 years	9,051.7	5,525.3	6,858.2	9,320.6	5,513.4	6,928.7
85 and over	19,081.1	14,695.9	16,055.1	19,334.5	14,530.8	15,984.3

SOURCE: Michigan Department of Public Health, *Michigan Health Statistics, 1981*, (Lansing: 1983), and special release.

NOTE: Rates per 100,000 population.

[1] Deaths with sex or race not stated were randomly allocated prior to computation of age-specific death rates. Deaths with age not stated were included in the category 85 and over.

TABLE III-12. DEATHS FROM ACCIDENTS BY EXTERNAL CAUSE OF INJURY, MICHIGAN RESIDENTS: 1974-1982[1]

Cause of injury	1974	1975	1976	1977	1978	1979	1980	1981	1982
Transport, total	2,040	1,961	2,093	2,094	2,237	2,076	1,979	1,819	1,645
Motor vehicle	1,929	1,841	1,993	1,993	2,138	1,967	1,880	1,727	1,555
Railroad	10	10	9	8	13	9	5	5	15
Other road vehicle, nontraffic	5	4	6	2	2	6	10	5	7
Water transportation	47	56	35	33	58	40	42	35	41
Air transportation	49	50	50	58	26	52	40	47	26
Other vehicle accidents	--	--	--	--	--	2	2	--	1
Nontransport, total	2,106	1,978	1,763	1,781	1,663	1,662	1,557	1,507	1,395
Poisoning	232	246	223	156	162	159	148	149	176
Falls	685	618	580	564	537	549	485	468	428
Blow from falling object	36	32	35	45	34	46	43	33	34
Machinery	22	32	22	21	19	38	43	55	37
Electric current	33	46	30	55	30	28	36	29	23
Fire and explosion of combustible material	337	274	251	311	245	276	234	249	210
Hot substance or object, caustic or corrosive material & steam	8	12	5	3	11	8	9	10	3
Firearm	87	67	53	60	37	58	53	51	34
Inhalation or ingestion of food or other object	151	139	143	105	141	144	137	129	145
Mechanical suffocation	49	38	41	28	38	44	37	37	22
Drowning or submersion	275	293	235	238	205	185	213	183	163
Other causes	191	181	145	195	204	127	119	114	120
Surgical & medical misadventures & late complications, late effects of injury and poisoning[2]	65	63	56	70	70	101	91	64	73
TOTAL	4,211	4,002	3,912	3,945	3,970	3,839	3,627	3,390	3,113

SOURCE: Michigan Department of Public Health, special release.

[1] Deaths in 1979-1982 are coded by the 9th Revision International Classification of Diseases, WHO, while those in 1970-1978 were coded by the 8th Revision International Classification of Diseases, Adapted, National Center for Health Statistics. Comparability ratios are not available so comparisons of death rates for these categories between years prior to 1979 and years since 1979 should be made with caution.

[2] 9th Revision ICD codes used are E870-E879 and E929-E949. 8th Revision ICDA codes used are E930-E949.

TABLE III-13. LIFE EXPECTANCY AT BIRTH, BY SEX, MICHIGAN AND U.S. RESIDENTS, SELECTED YEARS: 1920-1982

	Michigan[a]		United States	
Year	Male life expectancy	Female life expectancy	Male life expectancy	Female life expectancy
1920	55.1	56.0	53.6	54.6
1930	59.8	62.8	58.1	61.6
1940	63.4	67.4	60.8	65.2
1950	65.7	71.2	65.6	71.1
1960	67.1	73.3	66.6	73.1
1970	67.2	74.6	67.1	74.8
1971	67.3	74.9	67.4	75.0
1972	67.3	74.9	67.4	75.1
1973	67.4	75.0	67.6	75.3
1974	68.0	75.3	68.1	75.8
1975	68.5	75.7	68.7	76.5
1976	69.0	75.9	69.0	76.7
1977	69.3	76.3	69.3	77.1
1978	69.6	76.4	69.5	77.2
1979	70.0	76.8	69.9	77.6
1980	70.0	76.9	70.0	77.5
1981	70.2	76.9	n.a.	n.a.
1982	70.4	77.2	n.a.	n.a.

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1981 (Lansing: 1983), Table 2.70; and special release.
a. Michigan data for 1920, 1930, and 1940 are for white only.
n.a.: not available.

TABLE III-14. LIFE EXPECTANCY AT BIRTH, BY SEX AND RACE, MICHIGAN RESIDENTS: 1950, 1960, 1970, AND 1982

Population subgroup	Year			
	1950	1960	1970	1982
White				
Female	71.9	74.0	75.3	77.8
Male	66.2	67.5	68.2	71.2
Total white	68.8	70.5	71.6	74.5
All other				
Female	63.4	67.7	69.4	73.8
Male	60.4	63.6	61.0	65.9
Total all other	61.8	65.6	65.0	69.9
Total				
Female	71.2	73.3	74.6	77.2
Male	65.7	67.1	67.2	70.4
Total population	68.3	70.0	70.8	73.8

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1981 (Lansing: 1983), Table 2.71; and special release.

TABLE III-15. REPORTED CASES OF CERTAIN COMMUNICABLE DISEASES IN MICHIGAN, SELECTED PERIODS: 1930-1982

Disease	Annual average				Annual total			
	1930-1939	1940-1949	1950-1959	1960-1969	1979	1980	1981	1982
Diphtheria	1,121	245	66	2	0	1	0	0
Scarlet fever[a]	15,860	7,553	6,745	11,656	30,182	24,808	13,529	12,302
Smallpox	445	26	0	0	0	0	0	0
Typhoid fever	373	85	31	9	14	12	26	14
Whooping cough	11,815	8,676	3,464	884	102	38	30	34
Measles	28,467	29,939	28,907	21,569	869	250	34	64
Hepatitis[b] (includes infectious, serum & unsp.	0	44	748	2,798	2,036	1,799	1,700	1,745
Tuberculosis[c] (all forms)	5,897	5,967	5,559	3,181	1,052	1,168	931	864
Meningococcal infections[d]	190	257	164	127	79	77	93	81
Poliomyelitus	393	844	1,593	18	0	1	0	0
Syphilis	10,670	13,726	5,495	4,824	1,260	1,163	1,053	921
Gonorrhea	6,931	10,176	8,858	13,612	36,624	34,951	32,524	32,848
Chancroid	180	277	106	99	59	50	32	26

SOURCE: Michigan Department of Public Health, Michigan Health Statistics, 1981 (Lansing: 1983), Table 4.5, and special release.

[a] Streptococcal sore throat including scarlet fever.

[b] No cases tabulated prior to 1945. Figure shown for the period 1940-1949 is average of 1945-1949.

[c] Effective January 1975, a new diagnostic classification system for tuberculosis was adopted. As a result, case counts and rates prior to 1975 are not directly comparable to the figures in 1975 and later years.

[d] Prior to 1952 data were for meningococcic meningitis.

TABLE III-16. LIVE BIRTHS AND DEATHS AMONG MICHIGAN RESIDENTS, BY COUNTY: 1981 AND 1982

	Live births				Deaths			
	Number		Rate[a]		Number		Rate[a]	
County	1981	1982	1981	1982	1981	1982	1981	1982
Alcona	100	107	10.1	10.8	118	112	11.9	11.3
Alger	161	127	17.7	14.1	110	99	12.1	11.0
Allegan	1,389	1,333	16.8	15.9	598	644	7.2	7.7
Alpena	516	471	15.8	14.6	274	303	8.4	9.4
Antrim	227	272	13.7	16.2	181	186	10.9	11.1
Arenac	227	241	15.2	15.8	179	157	12.0	10.3
Baraga	119	119	13.8	13.8	106	100	12.3	11.6
Barry	701	672	15.0	14.4	333	374	7.1	8.0
Bay	1,804	1,816	15.1	15.2	928	961	7.8	8.0
Benzie	175	166	15.3	15.1	113	122	9.9	11.1
Berrien	2,641	2,496	15.5	14.9	1,483	1,463	8.7	8.7
Branch	658	650	16.4	16.4	361	342	9.0	8.6
Calhoun	2,163	2,123	15.3	15.0	1,248	1,268	8.8	8.9
Cass	727	625	14.8	13.0	404	384	8.2	8.0
Charlevoix	352	337	17.7	17.1	190	186	9.6	9.5
Cheboygan	346	317	16.6	15.1	215	246	10.3	11.7
Chippewa	401	384	13.7	13.0	276	279	9.4	9.4
Clare	363	360	14.9	14.9	273	277	11.2	11.4
Clinton	896	865	15.6	15.6	307	314	5.5	5.7
Crawford	195	168	20.3	17.6	94	86	9.8	9.0
Delta	582	625	14.8	15.7	363	373	9.2	9.4
Dickinson	382	362	15.1	14.2	305	281	12.0	11.0
Eaton	1,313	1,196	14.9	13.5	500	584	5.7	6.6
Emmet	351	333	14.8	14.0	222	202	9.4	8.5
Genesee	7,478	7,019	16.6	15.7	3,246	3,330	7.2	7.5
Gladwin	277	300	13.6	14.6	198	200	9.7	9.7
Gogebic	235	232	11.9	11.8	287	283	14.5	14.4
Grand Traverse	952	895	16.8	15.8	465	438	8.2	7.7
Gratiot	619	620	15.2	15.6	369	400	9.1	10.0
Hillsdale	634	634	15.2	15.2	417	366	10.0	8.8
Houghton	515	529	13.5	13.8	392	456	10.3	11.9
Huron	539	570	14.7	15.6	408	362	11.1	9.9
Ingham	4,420	4,372	15.9	15.9	1,649	1,614	5.9	5.9
Ionia	915	951	17.5	18.1	415	398	7.9	7.6
Iosco	564	594	19.4	19.7	289	278	9.9	9.2
Iron	185	159	13.5	11.8	205	172	14.9	12.8
Isabella	719	698	13.3	12.8	298	327	5.5	6.0
Jackson	2,213	2,146	14.8	14.3	1,225	1,254	8.2	8.4
Kalamazoo	3,258	3,223	15.1	14.8	1,471	1,459	6.8	6.7
Kalkaska	207	221	18.3	19.5	109	99	9.6	8.7
Kent	8,503	8,335	18.8	18.3	3,444	3,376	7.6	7.4
Keweenaw	23	22	11.7	10.9	31	49	15.7	24.2
Lake	127	109	16.2	13.1	112	120	14.3	14.4

TABLE III-16. LIVE BIRTHS AND DEATHS AMONG MICHIGAN RESIDENTS, BY COUNTY: 1981 AND 1982 (cont.)

	Live births				Deaths			
	Number		Rate[a]		Number		Rate[a]	
County	1981	1982	1981	1982	1981	1982	1981	1982
Lapeer	1,101	1,100	15.7	15.7	478	468	6.8	6.7
Leelanau	199	201	14.4	13.7	120	137	8.7	9.3
Lenawee	1,378	1,283	15.3	14.4	727	682	8.1	7.6
Livingston	1,437	1,341	14.2	13.5	566	570	5.6	5.7
Luce	91	89	14.1	14.2	67	82	10.4	13.1
Mackinac	158	134	15.4	13.2	115	111	11.2	10.9
Macomb	9,406	9,484	13.6	13.7	4,912	4,756	7.1	6.9
Manistee	292	305	12.8	13.6	248	246	10.9	11.0
Marquette	1,302	1,263	17.6	16.8	466	491	6.3	6.6
Mason	416	400	15.5	14.9	296	263	11.0	9.8
Mecosta	419	446	11.1	11.9	209	223	5.5	5.9
Menominee	399	402	15.3	15.5	293	267	11.2	10.3
Midland	1,197	1,157	16.3	15.7	481	447	6.6	6.1
Missaukee	213	203	20.9	19.6	93	90	9.1	8.7
Monroe	1,933	1,775	14.5	13.5	906	887	6.8	6.8
Montcalm	783	803	15.9	16.4	462	416	9.4	8.5
Montmorency	96	112	12.6	15.2	100	105	13.2	14.2
Muskegon	2,542	2,538	16.1	16.2	1,434	1,326	9.1	8.4
Newaygo	539	548	15.1	15.1	311	360	8.7	9.9
Oakland	13,917	13,840	13.7	13.7	7,239	7,420	7.1	7.3
Oceana	378	386	17.1	17.7	180	187	8.1	8.6
Ogemaw	282	281	17.2	17.1	189	203	11.5	12.4
Ontonagon	131	106	13.0	10.5	105	123	10.4	12.2
Osceola	346	294	18.0	15.1	164	171	8.5	8.8
Oscoda	103	110	14.5	15.4	85	95	11.9	13.3
Otsego	272	253	18.0	16.8	130	141	8.6	9.3
Ottawa	2,740	2,617	17.2	16.4	928	993	5.8	6.2
Presque Isle	222	189	15.7	13.4	169	161	12.0	11.4
Roscommon	240	236	13.8	13.2	227	222	13.1	12.5
Saginaw	3,636	3,555	16.0	15.8	1,673	1,652	7.4	7.4
St. Clair	2,005	2,056	14.4	14.8	1,222	1,217	8.8	8.8
St. Joseph	912	915	15.7	15.8	511	505	8.8	8.7
Sanilac	625	654	15.3	16.4	393	403	9.6	10.1
Schoolcraft	127	114	15.2	13.5	103	103	12.4	12.2
Shiawassee	1,063	1,077	15.0	15.5	492	535	6.9	7.7
Tuscola	871	852	15.3	15.2	448	447	7.9	8.0
Van Buren	1,180	1,073	17.5	15.9	595	588	8.8	8.7
Washtenaw	3,887	3,874	14.6	14.5	1,391	1,441	5.2	5.4
Wayne	34,120	33,647	14.8	14.7	22,795	22,410	9.9	9.8
Wexford	434	424	16.9	16.2	265	254	10.3	9.7
Not stated	11	19	--	--	19	14	--	--
MICHIGAN	140,579	137,950	15.2	15.0	75,818	75,536	8.2	8.2

SOURCE: Michigan Department of Public Health, special release.

a. Rate per 1,000 population.

TABLE III-18. NUMBER AND RATE OF MARRIAGES AND DIVORCES TAKING PLACE IN MICHIGAN AND THE UNITED STATES: 1963-1982

	Michigan				United States[a]			
Year	Number of marriages	Rate[b]	Number of divorces	Rate	Number of marriages	Rate[b]	Number of divorces	Rate
1963	68,160	8.5	17,479	2.2	1,654,000	8.8	428,000	2.3
1964	73,911	9.1	19,400	2.4	1,725,000	9.0	450,000	2.4
1965	81,247	9.9	20,305	2.5	1,800,000	9.3	479,000	2.5
1966	83,903	10.1	21,727	2.6	1,857,000	9.5	499,000	2.5
1967	84,363	9.8	23,620	3.0	1,927,000	9.7	523,000	2.6
1968	90,984	10.5	25,400	3.0	2,069,000	10.4	584,000	2.9
1969	93,392	10.7	28,347	3.3	2,145,000	10.6	639,000	3.2
1970	91,933	10.4	29,934	3.4	2,158,802	10.6	708,000	3.5
1971	92,134	10.3	31,790	3.5	2,190,481	10.6	773,000	3.7
1972	94,447	10.5	35,505	3.9	2,282,154	10.9	845,000	4.0
1973	94,486	10.4	37,128	4.1	2,284,108	10.8	915,000	4.3
1974	88,023	9.7	39,940[c]	4.4[c]	2,229,667	10.5	977,000	4.6
1975	82,856	9.1	40,782	4.5	2,152,662	10.0	1,036,000	4.8
1976	82,753	9.1	43,101	4.7	2,154,807	9.9	1,083,000	5.0
1977	86,088	9.4	43,036	4.7	2,178,367	9.9	1,091,000	5.0
1978	88,333	9.6	45,029	4.9	2,282,272	10.3	1,130,000	5.1
1979	89,450	9.7	44,242	4.8	2,331,337	10.4	1,181,000	5.3
1980	86,898	9.4	45,047	4.9	2,390,252	10.6	1,189,000	5.3
1981	85,252	9.2	43,167	4.7	2,438,000[p]	10.7[p]	1,219,000[p]	5.3[p]
1982	82,633	9.0	39,739	4.3	2,495,000[p]	10.8[p]	1,180,000[p]	5.1[p]

SOURCE: Michigan Department of Public Health, *Michigan Health Statistics, 1981* (Lansing: 1983), Table 4.1, and special release; National Center for Health Statistics, *Vital Statistics of the United States, 1978*, vol. 3, *Marriage and Divorce* (Hyattsville, MD: 1982), and *Monthly Vital Statistics Report*, (Hyattsville, MD: monthly).

a. United States rates for 1971-1979 have been revised using population estimates based on the 1980 census enumeration.

b. Beginning with 1978, marriage data for the United States included nonlicensed marriages registered in California.

c. Estimate

p.: provisional.

TABLE III-17. MARRIAGES IN MICHIGAN, BY ORDER OF MARRIAGE AND AGE OF BRIDE AND GROOM: 1982

	Bride, order of marriage						Groom, order of marriage					
Age	First	Second	Third	Fourth or more	Not stated	Total	First	Second	Third	Fourth or more	Not stated	Total
Under 15	9	0	0	0	0	9	0	0	0	0	0	0
15	105	0	0	0	2	107	1	0	0	0	0	1
16	928	0	0	0	0	928	50	0	0	0	0	50
17	1,993	8	0	0	0	2,001	368	0	0	0	1	369
18	4,807	30	2	0	0	4,839	1,823	3	0	0	0	1,826
19	6,042	88	0	0	3	6,133	3,067	8	1	0	1	3,077
20-24	28,100	2,778	111	9	3	31,001	27,303	1,177	32	0	2	28,514
25-29	9,776	5,575	706	64	5	16,126	14,887	4,693	378	19	6	19,983
30-34	2,117	4,397	1,075	166	2	7,757	4,025	5,014	917	118	1	10,075
35-39	488	2,572	885	219	2	4,166	956	3,568	1,034	190	0	5,748
40-44	166	1,503	593	190	1	2,453	280	2,068	726	194	0	3,268
45-49	73	935	389	140	0	1,537	137	1,348	569	163	1	2,218
50-54	54	611	244	81	0	990	83	975	406	128	0	1,592
55-59	29	435	150	58	0	672	66	739	287	91	0	1,183
60-64	28	407	125	33	0	593	45	558	196	54	0	853
65-69	12	251	77	25	1	366	21	380	137	52	0	590
70-74	8	147	55	14	0	224	13	258	78	18	0	367
75 and over	7	75	27	15	0	124	9	205	79	23	1	317
Not stated	4	2	0	0	0	6	0	0	1	0	0	1
MICHIGAN TOTAL	54,746	19,814	4,439	1,014	19	80,032	53,134	20,994	4,841	1,050	13	80,032

SOURCE: Michigan Department of Public Health, special release.

TABLE III-19. PATIENTS, RESIDENTS AND NUMBER OF EMPLOYEES IN STATE MENTAL HEALTH FACILITIES: 1955-1983

End of Fiscal year	Patients in state psychiatric hospitals	Employees in state psychiatric hospitals	Residents in centers for developmental disabilities	Employees in centers for developmental disabilities	Total patients and residents	Total employees in state facilities
1955	17,075	4,997	9,025	2,475	26,100	7,472
1960	19,059	5,656	11,261	3,193	30,320	9,569
1965	17,053	6,275	12,516	4,882	29,569	11,157
1970	11,134	7,698	11,844	6,338	22,978	14,036
1975	4,925	7,399	6,537	5,902	11,462	13,301
1976	4,354	6,620	6,191	6,434	10,545	13,054
1977	4,405	7,098	6,047	7,196	10,452	14,294
1978	4,779	7,657	5,728	7,850	10,507	15,507
1979	4,712	7,904	5,142	8,474	9,854	16,378
1980	4,527	7,803	4,371	7,153	8,898	14,956
1981	4,481	6,113	3,574	5,561	8,055	11,674
1982	4,383	6,158	2,973	4,641	7,356	10,799
1983	4,235	6,481	2,594	4,330	6,829	10,811

SOURCE: Michigan Department of Mental Health, special release.

TABLE III-20. BOOK CENSUS OF PATIENTS IN STATE REGIONAL PSYCHIATRIC HOSPITALS, FISCAL YEARS ENDED SEPTEMBER 30, 1982 AND 1983

Name of institution	Location	Book census, September 30					
		Residents[a]		Nonresidents[b]		Total	
		1982	1983	1982	1983	1982	1983
Caro Regional Mental Health Center	Caro	15	13	0	1	15	14
Clinton Valley Center	Pontiac	504	519	153	128	657	647
Detroit Psychiatric Institute	Detroit	132	144	94	43	226	187
Fairlawn Center	Pontiac	210	146	5	102	259	248
Hawthorne Center	Northville	113	111	167	125	280	236
Kalamazoo Regional Psychiatric Center	Kalamazoo	647	625	137	121	784	745
Lafayette Clinic	Detroit	95	92	59	54	154	146
Newberry Regional Mental Health Center	Newberry	89	82	8	23	97	105
Northville Regional Psychiatric Hospital	Northville	1,037	991	150	142	1,137	1,133
Walter P. Reuther Psychiatric Hospital	Westland	287	314	6	3	293	317
Traverse City Regional Psychiatric Hospital	Traverse City	244	182	6	0	250	182
Ypsilanti Regional Psychiatric Hospital	Ypsilanti	726	651	113	122	839	771
Center for Forensic Psychiatry	Ann Arbor	210	225	5	5	215	225
MICHIGAN		4,312	4,095	903	969	5,049	4,956

SOURCE: Michigan Department of Mental Health, special release.

NOTE: Facilities for mentally ill.

a. In house and on authorized or unauthorized leave.

b. Community living facilities, foster family care, and convalescent status.

TABLE III-21. BOOK CENSUS OF PATIENTS IN CENTERS FOR DEVELOPMENTAL DISABILITIES, FISCAL YEARS ENDED SEPTEMBER 30, 1982 AND 1983

Name of institution	Location	Book census, September 30					
		Residents[a]		Nonresidents[b]		Total	
		1982	1983	1982	1983	1982	1983
Alpine Regional Center for Developmental Disabilities[c]	Gaylord	158	--	297	--	455	--
Caro Regional Mental Health Center	Caro	455	442	99	96	554	538
Coldwater Regional Center for Developmental Disabilities	Coldwater	531	533	234	130	765	663
Hillcrest Regional Center for Devlopmental Disabilities[d]	Howell	--	--	--	--	--	--
Macomb-Oakland Regional Center	Mt. Clemens	219	215	987	1,036	1,206	1,251
Mt. Pleasant Regional Center for Developmental Disabilities	Mt. Pleasant	547	563	308	323	855	886
Muskegon Regional Center for Developmental Disabilities	Muskegon	473	482	78	85	551	567
Newberry Regional Mental Health Center	Newberry	220	205	17	27	237	232
Northville Residential Training Center[c]	Northville	104	--	248	--	352	--
Oakdale Regional Center for Developmental Disabilities	Lapeer	706	586	226	263	932	849
Plymouth Center for Human Development	Northville	198	88	497	463	695	551
Southgate Regional Center for Developmental Disabilities	Southgate	194	204	554	587	748	791
MICHIGAN		3,805	3,318	3,545	3,010	7,350	6,328

SOURCE: Michigan Department of Mental Health, special release.

NOTE: Facilities for mentally retarded.

a. In house and on authorized or unauthorized leave.

b. Community living facilities, foster family care, and convalescent status.

c. Facilities closed end of year 1982.

d. Facility closed end of year 1981.

TABLE III-22. UTILIZATION OF COMMUNITY HOSPITALS IN MICHIGAN: 1967-1982

Year	Hospitals[a]	Beds	Admissions	Occupancy (percent)	Average daily census
1967	199	32,063	1,104,893	80.6	25,848
1968	198	32,426	1,099,034	81.2	26,339
1969	200	32,802	1,138,246	81.5	26,743
1970	197	33,136	1,149,799	80.4	26,625
1971	199	33,851	1,174,859	79.5	26,928
1972	201	35,464	1,229,295	79.5	28,186
1973	202	36,447	1,266,177	79.5	28,962
1974	211	38,120	1,354,383	79.9	30,447
1975	210	39,089	1,383,654	79.4	31,021
1976	210	39,695	1,394,464	77.5	30,755
1977	212	40,146	1,426,706	76.7	30,812
1978	207	40,097	1,417,078	76.4	30,639
1979	239	50,255	1,492,926	78.4	39,420
1980	236	49,369	1,508,201	80.0	39,509
1981	236	48,963	1,496,638	79.5	38,926
1982	233	48,328	1,466,733	78.8	38,085

SOURCE: American Hospital Association, Hospital Statistics 1972 through 1982 (Chicago: annually); and American Hospital Association, Hospitals, Journal of the American Hospital Association, Guide Issue, 1967 through 1971 (Chicago: annually).

[a] Hospitals accepted for registration by the American Hospital Association; excludes hospital units of institutions.

IV. EDUCATION

The Michigan Department of Education's Michigan Educational Statistics and Fact Book on Higher Education are the sources of most data relating to the educational system in this state. The department publishes numerous other items, among them Bulletin 1011. Many statistics about education for the states and nation are published by the U.S. Office of Education.

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TABLE IV-1. EDUCATIONAL ATTAINMENT OF THE POPULATION 25 YEARS OLD AND OVER IN MICHIGAN, BY COUNTY: CENSUS 1980

		Percentage			Percentage	
County	Population 25 & over	High school graduates	College graduates	Non-white population 25 & over	High school graduates non-white	College graduates non-white
Alcona	6,398	59.1	6.9	40	60.0	20.0
Alger	5,548	63.1	9.4	121	57.0	4.1
Allegan	45,789	64.7	10.1	1,465	42.3	4.9
Alpena	18,272	63.8	8.8	91	41.7	.0
Antrim	9,824	68.2	11.8	69	50.7	4.3
Arenac	8,625	53.3	6.2	51	35.2	.0
Baraga	5,035	65.8	8.2	370	60.5	8.9
Barry	26,506	69.4	10.4	349	57.5	7.4
Bay	67,524	64.4	8.9	1,425	57.7	12.3
Benzie	6,779	67.3	12.2	125	48.8	5.6
Berrien	98,331	64.8	13.3	11,512	43.6	8.4
Branch	23,255	65.3	8.7	168	31.5	3.5
Calhoun	83,277	67.7	11.8	7,859	58.2	7.9
Cass	29,011	63.3	8.0	2,542	45.5	4.0
Charlevoix	11,636	69.3	13.1	204	48.0	5.3
Cheboygan	12,257	64.4	9.1	130	43.0	8.4
Chippewa	16,509	64.6	11.0	1,342	49.4	2.4
Clare	14,538	57.8	6.4	130	55.3	.0
Clinton	30,256	72.9	11.3	482	65.9	12.0
Crawford	5,533	70.9	9.5	82	67.0	.0
Delta	22,586	68.7	10.4	276	50.3	9.4
Dickinson	15,870	69.4	10.4	31	80.6	19.3
Eaton	49,269	78.0	15.8	1,638	74.6	22.4
Emmet	13,491	75.4	17.5	319	49.2	2.8
Genesee	244,826	67.7	10.9	39,377	57.9	7.2
Gladwin	12,028	57.4	6.0	80	63.7	5.0
Gogebic	12,941	65.6	9.5	243	55.1	6.9
Grand Traverse	31,536	77.1	19.0	320	61.8	9.6
Gratiot	22,362	69.4	11.0	342	54.6	13.4
Hillsdale	23,851	68.6	9.8	142	58.4	9.8
Houghton	20,142	63.2	14.3	240	91.6	47.9
Huron	21,512	57.3	7.9	174	43.6	12.0
Ingham	139,834	77.9	25.9	13,019	67.2	21.8
Ionia	27,177	67.2	8.0	682	42.3	4.5
Iosco	16,052	67.9	11.2	488	78.8	10.8

TABLE IV-1. EDUCATIONAL ATTAINMENT OF THE POPULATION 25 YEARS OLD AND OVER IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

County	Population 25 & over	Percentage High school graduates	Percentage College graduates	Non-white population 25 & over	Percentage High school graduates non-white	Percentage College graduates non-white
Iron	9,302	63.4	10.0	32	65.6	21.8
Isabella	23,425	70.8	20.6	636	48.4	19.4
Jackson	88,518	69.1	12.2	7,684	51.0	6.6
Kalamazoo	116,578	75.7	23.0	8,159	58.8	15.0
Kalkaska	6,215	62.6	7.8	46	47.8	.0
Kent	248,187	70.8	16.2	17,754	53.9	9.4
Keweenaw	1,410	49.7	7.0	8	100.0	.0
Lake	5,063	49.0	6.8	904	30.7	4.8
Lapeer	37,063	67.4	8.5	501	35.3	7.3
Leelanau	8,657	76.8	19.3	163	49.6	7.9
Lenawee	50,849	67.8	11.8	1,300	45.4	6.2
Livingston	55,328	77.2	16.3	531	76.6	21.4
Luce	4,053	58.4	11.1	128	54.6	15.6
Mackinac	6,134	63.0	9.2	405	54.0	.4
Macomb	396,580	69.1	10.7	9,066	65.8	21.4
Manistee	14,116	62.2	9.6	158	50.6	10.7
Marquette	38,878	75.6	17.5	1,092	61.5	13.8
Mason	16,078	66.0	9.9	271	64.2	16.9
Mescota	16,537	69.5	14.9	319	65.8	7.5
Menominee	15,378	67.0	8.1	132	59.0	11.3
Midland	40,532	76.8	22.7	861	85.3	46.8
Missaukee	5,690	59.5	7.0	51	37.2	11.7
Monroe	73,432	63.3	8.8	1,666	51.7	8.2
Montcalm	27,100	63.8	8.7	341	44.2	6.7
Montmorency	4,710	60.1	6.4	22	81.8	9.0
Muskegon	89,173	65.2	10.6	9,822	48.6	4.6
Newaygo	20,336	60.5	8.8	548	40.5	3.6
Oakland	600,699	77.8	24.0	34,220	68.6	24.6
Oceana	12,542	63.6	9.2	307	34.2	4.8
Ogemaw	9,987	57.4	6.7	63	66.6	14.2
Ontonagon	6,120	64.6	8.9	39	56.4	.0
Osceola	10,922	61.7	8.3	54	42.5	7.4
Oscoda	4,303	59.3	7.7	5	60.0	.0
Otsego	8,481	70.8	14.0	45	80.0	24.4
Ottawa	84,991	69.1	14.6	1,507	44.2	11.7

TABLE IV-1. EDUCATIONAL ATTAINMENT OF THE POPULATION 25 YEARS OLD AND OVER IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

County	Population 25 & over	Percentage		Non-white population 25 & over	Percentage	
		High school graduates	College graduates		High school graduates non-white	College graduates non-white
Presque Isle	8,590	56.9	7.5	62	69.3	35.4
Roscommon	10,893	62.8	8.0	34	58.8	.0
Saginaw	124,520	65.7	11.2	19,651	49.5	6.8
St. Clair	78,018	65.0	9.2	2,058	43.2	4.4
St. Joseph	32,411	65.7	9.2	921	45.8	4.6
Sanilac	23,578	60.8	7.5	261	36.3	6.5
Schoolcraft	5,195	58.7	9.1	214	49.5	9.3
Shiawassee	38,777	67.6	9.2	408	52.9	9.3
Tuscola	31,316	62.6	7.8	510	39.8	5.2
Van Buren	38,453	62.0	10.1	3,334	38.7	3.9
Washtenaw	141,291	80.9	36.0	17,389	72.2	30.4
Wayne	1,350,573	61.4	11.1	447,345	54.9	7.5
Wexford	14,678	62.5	10.3	59	49.1	.0
TOTAL	5,254,040	67.9	14.2	677,014	56.0	9.6

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF3, computer tape.

TABLE IV-2. STUDENT ENROLLMENT, TEACHERS, STUDENT-TEACHER RATIO, AVERAGE TEACHER SALARY, AND NUMBER OF SCHOOL DISTRICTS IN MICHIGAN, PUBLIC SCHOOLS ONLY, SCHOOL YEARS: 1961-1962 THROUGH 1981-82

School year	Enrollment[a]	Number of teachers[b]	Student-teacher ratio	Average teacher's salary	Number of districts
1961-62	1,733,705	66,024	26.3	6,091	1,794
1962-63	1,794,045	68,099	26.3	6,307	1,580
1963-64	1,856,895	69,376	26.8	6,474	1,515
1964-65	1,917,890	72,935	26.3	6,745	1,227
1965-66	1,968,403	76,047	25.9	6,896	993
1966-67	2,033,982	80,637	25.2	7,535	866
1967-68	2,079,704	85,346	24.4	8,238	712
1968-69	2,122,915	87,487	24.3	9,134	648
1969-70	2,164,386	89,049	24.3	10,045	638
1970-71	2,178,745	90,672	24.0	11,034	624
1971-72	2,212,505	91,190	24.8	11,671	608
1972-73	2,193,270	93,852	23.4	12,070	602
1973-74	2,159,966	94,221	22.9	12,852	597
1974-75	2,139,720	93,580	22.9	14,059	590
1975-76	2,127,917	92,677	23.0	15,064	587
1976-77	2,081,936	90,780	22.9	15,426	581
1977-78	2,023,944	90,312	22.4	16,445	579
1978-79	1,965,685	88,652	22.2	18,016	576
1979-80	1,910,385	87,487	21.8	19,663	575
1980-81	1,859,934	84,041	22.1	21,779	574
1981-82	1,792,331	78,447	22.9	24,304	574

SOURCE: Michigan Department of Education, Analysis of Michigan Public School Revenues and Expenditures, 1961 through 1982, Bulletin 1011 (Lansing: annually): and Michigan Deaprtment of Education, special release (for number of teachers and ratio, 1961 through 1966).

a. Membership is defined as the number of students enrolled on the fourth Friday after the opening of the school year.

TABLE IV-3. NUMBER OF TEACHING POSITIONS, AVERAGE TEACHER'S SALARY, AND PUPIL MEMBERSHIP OF PUBLIC SCHOOLS IN MICHIGAN, BY SIZE OF SCHOOL DISTRICT: 1970-1971 AND 1981-1982

Size	Number of districts		Teaching position		Average teacher's salary		Audited Pupil membership, Septmeber	
of district	1970-1971	1981-1982	1970-1971	1981-1982	1970-1971	1981-1982	1970-1971	1981-1982
50,000 and over	1	1	11,136	8,702	$11,475	$26,901	89,382	218,074
20,000 - 49,999	12	7	11,528	8,010	11,930	25,990	339,662	190,316
10,000 - 19,999	20	12	12,340	7,663	11,825	26,815	285,483	172,846
5,000 - 9,999	64	53	18,509	16,680	11,368	26,018	442,596	377,638
4,500 - 4,999	14	16	2,672	3,219	10,767	24,367	66,211	74,913
4,000 - 4,499	17	12	2,914	2,280	10,667	23,889	71,837	50,445
3,500 - 3,999	28	23	4,270	3,757	10,674	23,728	102,865	84,568
3,000 - 3,499	18	25	2,415	3,497	10,211	23,673	58,426	80,439
2,500 - 2,999	31	41	559	4,923	10,076	23,705	86,030	112,194
2,000 - 2,499	63	55	5,783	5,451	10,052	21,824	40,414	122,422
1,500 - 1,999	65	70	4,780	5,357	9,690	20,984	16,072	120,841
1,000 - 1,499	83	84	4,361	4,684	9,721	19,910	4,432	103,567
500 - 999	79	91	2,570	3,399	9,070	18,958	57,480	68,520
Below 500	129	84	835	825	8,387	17,221	17,855	15,528
TOTAL	624	574	90,672	78,447	11,034	24,304	2,178,745	1,792,331

SOURCE: Michgan Department of Education, *Analysis of Michigan Public School Revenues and Expenditures*, 1970-1971 and 1981-1982, *Bulletin 1011* (Lansing: annually).

TABLE IV-4. NUMBER AND PERCENT ENROLLMENT IN NON-PUBLIC SCHOOLS IN MICHIGAN, BY COUNTY: CENSUS 1980

County	Kindergarten - Grade 8			Grades 9 - 12		
	Total population enrolled in school	Total enrolled in private school	Percent enrolled in private school	Total population enrolled in school	Total enrolled in private school	Total enrolled in private school
Alcona	1,282	2	.1	701	3	.4
Alger	1,419	18	1.2	705	15	2.1
Allegan	13,292	1,520	11.4	6,263	494	7.8
Alpena	4,756	418	8.7	2,899	8	.2
Antrim	2,348	36	1.5	1,176	2	.1
Arenac	2,279	6	.2	1,204	5	.4
Baraga	1,306	74	5.6	650	3	.4
Barry	7,252	216	2.9	3,745	46	1.2
Bay	18,258	4,854	26.5	9,689	1,085	11.1
Benzie	1,823	27	1.6	827	27	3.2
Berrien	26,747	3,783	14.1	12,516	1,095	8.7
Branch	5,994	462	7.7	2,794	25	.8
Calhoun	20,833	981	4.7	10,018	537	5.3
Cass	7,772	261	3.3	3,633	112	3.0
Charlevoix	2,937	74	2.5	1,543	3	.1
Cheboygan	3,161	193	6.1	1,607	99	6.1
Chippewa	3,953	60	1.5	2,065	5	.2
Clare	3,461	86	2.4	1,853	23	1.2
Clinton	9,938	1,135	11.4	4,920	222	4.5
Crawford	1,401	29	2.0	700	37	5.2
Delta	6,012	441	7.3	3,284	15	.4
Dickinson	3,202	250	7.8	1,723	18	1.0
Eaton	14,428	852	5.9	6,992	136	1.9
Emmet	3,371	421	12.4	1,764	15	.8
Genesee	73,639	5,344	7.2	37,249	1,843	4.9

TABLE IV-4. NUMBER AND PERCENT ENROLLMENT IN NON-PUBLIC SCHOOLS IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

	Kindergarten - Grade 8			Grades 9 - 12		
County	Total population enrolled in school	Total enrolled in private school	Percent enrolled in private school	Total population enrolled in school	Total enrolled in private school	Total enrolled in private school
Gladwin	3,010	183	6.0	1,496	22	1.4
Gogebic	2,337	261	11.1	1,319	80	6.0
Grand Traverse	7,806	716	9.1	4,107	657	15.9
Gratiot	6,231	82	1.3	3,160	13	.4
Hillsdale	6,500	347	5.3	3,073	66	2.1
Houghton	4,133	32	.7	2,155	0	.0
Huron	5,477	919	16.7	2,736	46	1.6
Ingham	36,112	2,362	6.5	17,100	655	3.8
Ionia	8,191	1,022	12.4	4,359	289	6.6
Iosco	3,844	73	1.8	2,063	24	1.1
Iron	1,480	3	.2	876	0	.0
Isabella	6,615	602	9.1	3,287	205	6.2
Jackson	22,322	2,311	10.3	11,311	1,114	9.8
Kalamazoo	28,901	2,834	9.8	13,551	1,035	7.6
Kalkaska	1,835	11	.5	750	8	1.0
Kent	63,379	10,977	17.3	33,464	5,185	15.4
Keweenaw	189	2	1.0	105	0	.0
Lake	1,052	21	1.9	565	14	2.4
Lapeer	12,888	569	4.4	6,192	172	2.7
Leelanau	2,029	236	11.6	1,096	153	13.9
Lenawee	14,452	797	5.5	6,422	222	3.4
Livingston	18,327	735	4.0	8,827	173	1.9
Luce	952	21	2.2	438	2	.4
Mackinac	1,413	4	.2	896	0	.0
Macomb	106,367	10,980	10.3	57,078	3,695	6.4

TABLE IV-4. NUMBER AND PERCENT ENROLLMENT IN NON-PUBLIC SCHOOLS IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

	Kindergarten - Grade 8			Grades 9 - 12		
County	Total population enrolled in school	Total enrolled in private school	Percent enrolled in private school	Total population enrolled in school	Total enrolled in private school	Total enrolled in private school
Manistee	3,224	273	8.4	1,866	250	13.3
Marquette	9,700	258	2.6	4,146	6	.1
Mason	3,681	248	6.7	1,860	20	1.0
Mecosta	4,264	374	8.7	2,044	28	1.3
Menominee	3,737	452	12.0	1,946	46	2.3
Midland	12,212	695	5.6	5,907	62	1.0
Missaukee	1,554	168	10.8	752	71	9.4
Monroe	23,089	3,017	13.0	10,898	787	7.2
Montcalm	7,635	318	4.1	3,682	115	3.1
Montmorency	1,019	9	.8	508	4	.7
Muskegon	24,317	2,357	9.6	12,758	1,244	9.7
Newaygo	5,565	353	6.3	2,789	81	2.9
Oakland	148,462	15,830	10.6	75,940	8,012	10.5
Oceana	3,577	108	3.0	1,810	25	1.3
Ogemaw	2,387	121	5.0	1,131	6	.5
Ontonagon	1,478	4	.2	915	0	.0
Osceola	3,073	160	5.2	1,454	51	3.5
Oscoda	903	46	5.0	468	21	4.4
Otsego	2,447	391	15.9	1,287	182	14.1
Ottawa	25,020	5,294	21.1	12,382	2,075	16.7
Presque Isle	2,073	474	22.8	1,138	9	.7
Roscommon	1,920	74	3.8	1,046	18	1.7
Saginaw	38,084	4,830	12.6	18,522	1,650	8.9
St. Clair	22,490	1,392	6.1	11,482	304	2.6
St. Joseph	8,468	542	6.4	3,951	53	1.3

TABLE IV-4. NUMBER AND PERCENT ENROLLMENT IN NON-PUBLIC SCHOOLS IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

	Kindergarten - Grade 8			Grades 9 - 12		
County	Total population enrolled in school	Total enrolled in private school	Percent enrolled in private school	Total population enrolled in school	Total enrolled in private school	Total enrolled in private school
Sanilac	6,388	137	2.1	3,345	24	.7
Schoolcraft	1,266	211	16.6	632	11	1.7
Shiawassee	12,310	923	7.4	5,811	140	2.4
Tuscola	9,876	916	9.2	4,655	97	2.0
Van Buren	11,053	761	6.8	4,844	103	2.1
Washtenaw	32,146	2,359	7.3	15,030	787	5.2
Wayne	356,348	53,836	15.1	164,593	22,033	13.3
Wexford	3,783	246	6.5	1,918	44	2.2
TOTAL	1,400,055	154,820	11.0	688,726	58,062	8.4

SOURCE: Bureau of the Census, 1980 Population and Housing, STF3, computer tape.

TABLE IV-5. ENROLLMENT BY GRADES IN MICHIGAN PUBLIC SCHOOLS, ON THE FOURTH FRIDAY FOLLOWING LABOR DAY: 1974-1982

Grade	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
K	155,987	159,981	152,787	136,843	129,592	125,332	122,455	116,753	120,826
1	147,344	149,484	154,492	149,567	135,997	128,961	123,662	119,175	113,917
2	146,946	141,795	143,778	148,878	144,113	130,838	123,337	116,583	112,666
3	146,188	141,906	137,875	139,365	144,565	140,107	126,503	118,002	112,133
4	151,769	143,911	139,795	135,434	136,680	141,608	136,255	122,605	114,818
5	159,768	149,672	142,170	137,803	133,776	134,610	139,185	132,651	119,662
6	162,093	158,018	148,637	141,603	137,098	133,242	133,698	136,780	131,480
7	166,923	163,788	159,610	149,898	142,851	138,511	133,885	132,859	136,656
8	170,013	165,012	162,193	157,603	148,293	140,782	135,966	130,218	129,706
9	175,558	177,307	174,405	171,649	166,411	156,999	149,403	142,775	135,946
10	173,641	173,314	172,489	166,038	161,592	156,850	146,734	137,584	133,892
11	158,309	158,655	157,875	155,259	149,912	145,963	142,779	134,019	129,226
12	141,910	143,365	143,093	139,565	138,931	132,476	130,699	128,326	121,036
Other[a]	83,271	101,709	92,737	95,661	96,346	104,158	115,504	124,992	135,588
TOTAL	2,139,720	2,127,917	2,081,936	2,025,166	1,966,157	1,910,437	1,860,065	1,793,322	1,745,552

SOURCE: Michigan Department of Education, Michigan Educational Statistics, (Lansing: annually), Table 3, and special release for (1980-81, 1981-82 and 1982-83 data).

a. Includes students of elementary and secondary ungraded classes, ungraded special needs and postgraduate. Does not include prekindergarteners.

TABLE IV-6. SCHOOL ENROLLMENT IN MICHIGAN, BY TYPE OF SCHOOL: CENSUS 1980

Enrollment and type of schools	White	Black	Total
Nursery school	84,466	16,558	104,105
Public	40,918	10,255	52,728
Church-related	15,128	2,847	18,555
Other private	28,420	3,456	32,822
Kindergarten	112,592	23,318	140,080
Public	100,943	21,083	125,660
Church-related	9,694	1,334	11,439
Other private	1,955	901	2,981
Elementary (1 to 8 years)	1,018,736	210,209	1,259,975
Public	896,529	195,478	1,119,575
Church-related	115,955	12,542	131,564
Other private	6,252	2,189	8,836
High school (1 to 4 years)	575,386	100,515	688,726
Public	523,950	94,945	630,644
Church-related	45,642	4,302	50,838
Other private	5,794	1,268	7,224
College	450,476	68,250	531,671
Public	397,411	60,952	469,423
TOTAL (persons 3 years old and over)	2,241,656	418,850	2,724,557

SOURCE: Bureau of the Census, 1980 Census of Population, General Social and Economic Characteristics, Michigan (Washington, D.C.: 1983), Volume 1, Chapter C, Section 1, PC80-1-C24, Tables 66 and 76.

TABLE IV-7. PUBLIC SCHOOL STAFF IN MICHIGAN, 1979-1980, THROUGH 1982-1983

(Full-time equivalent)

Staff category	1979-1980	1980-1981	1981-1982	1982-1983
Instructional staff				
Professional				
Classroom teachers	89,840	86,619	81,746	78,232
Other teachers	632	490	429	373
Attendance personnel	257	251	225	212
Social workers	804	813	681	654
Guidance staff	3,040	2,894	2,718	2,569
Health personnel	447	482	414	390
Psychological staff	532	543	514	511
Speech and audiology	912	970	900	875
Other pupil services	584	703	603	359
Consultants	1,255	1,007	971	1,192
Supervision and direction	881	926	817	756
Librarians	1,804	1,740	1,563	1,532
Other staff services and audio-visual	230	378	278	286
Nonprofessional				
Teacher aides	11,839	11,165	9,200	7,780
Other	1,040	1,061	833	877
Library aides	1,489	1,420	1,190	1,220
Secretary-clerical aides	2,571	2,375	2,090	2,029
Other aides	1,131	1,090	774	797
Other instructional support	297	286	202	166
TOTAL	119,585	115,213	106,148	100,810
Noninstructional staff				
Professional				
Executive administration	1,492	1,476	1,365	1,347
Fiscal service staff	560	603	589	596
Data processing staff	122	109	110	107
Principals	3,270	3,191	3,109	3,254
Assistant principals	1,445	1,432	1,381	1,316
Other professionals	993	1,028	1,012	928
Nonprofessional				
School food service staff	12,447	12,694	11,458	10,191
Transportation staff	12,316	12,040	11,511	11,240
Operation and maintenance staff	17,689	17,400	16,015	15,643
Data processing staff	302	310	285	276
Secretary and clerical	9,841	9,945	9,395	9,093
Other	2,019	1,875	1,264	1,169
TOTAL	62,495	62,103	57,494	55,160
GRAND TOTAL	182,080	177,316	163,642	155,970

SOURCE: Michigan Department of Education, special release.

TABLE IV-8. GENERAL FUND REVENUE SOURCES AND CURRENT OPERATING EXPENDITURES FOR PUBLIC SCHOOLS IN MICHIGAN: 1970-1971 THROUGH 1981-1982

School year	Revenues Local ($1,000)	 State ($1,000)	 Federal ($1,000)	 Other[a] ($1,000)	 Total[b] ($1,000)	Per pupil revenue	Total current operating expenditures ($1,000)	Per pupil current operating expenditures
1970-71	1,037,042	754,799	81,034	5,534	1,878,408	862.15	1,790,120	821.63
1971-72	1,148,771	798,505	102,418	4,824	2,054,519	928.60	1,935,035	874.59
1972-73	1,212,837	859,463	112,945	5,096	2,190,341	998.66	2,085,335	950.79
1973-74	1,378,727	945,116	116,182	4,977	2,445,002	1,131.96	2,271,936	1,051.86
1974-75	1,544,679	991,396	145,713	5,714	2,687,502	1,256.00	2,548,409	1,191.01
1975-76	1,715,734	1,028,155	161,897	4,644	2,910,430	1,367.74	2,772,531	1,302.94
1976-77	1,614,153	1,193,332	149,280	6,715	2,963,479	1,423.42	2,934,395	1,409.46
1977-78	1,804,754	1,290,231	192,513	5,547	3,293,046	1,627.04	3,215,655	1,588.81
1978-79	1,993,161	1,349,221	215,510	6,433	3,564,326	1,813.27	3,500,835	1,780.97
1979-80	2,273,569	1,377,578	226,782	3,837	3,881,765	2,031.93	3,826,569	2,003.04
1980-81	2,633,766	1,207,740	254,153	4,468	4,100,128	2,204.45	4,121,362	2,215.86
1981-82	2,996,860	1,173,373	210,491	4,291	4,385,014	2,446.54	4,392,107	2,450.50

SOURCE: Michigan Department of Education, *Analysis of Michigan Public School Revenues and Expenditures*, 1970 through 1982, *Bulletin 1011* (Lansing: annually).

NOTE: General fund is the fund used to record the operations of the school district pertaining to education, except those specifically described under Building and Site and Debt Retirement funds. Current operating expenditures are the basic expenses of a school district including expenditures for instruction, administration, attendance, health, transportation, fixed charges, operation of plant, and maintenance of plant. The current operating expenditures exclude capital outlay, community services, student services, and outgoing transfers.

a. Intermediate sources, gifts, and bequests.

b. Excludes incoming transfers.

TABLE IV-9. PUPILS AND SCHOOLS PARTICIPATING IN SCHOOL LUNCH PROGRAM IN MICHIGAN: FISCAL YEARS 1965-1982

Year	Number of schools participating[a,b]	Pupils participating[b]		
		Number (1,000)	Federal cost mill $	Percentage of total enrollment[c]
1965	2,228	513	n.a.	22.7
1966	2,330	556	n.a.	23.7
1967	2,458	586	n.a.	24.6
1968	2,440	560	n.a.	23.3
1969	2,506	588	5.0	23.9
1970	2,545	654	6.5	37.7
1971	2,757	692	12.9	28.4
1972	2,943	675	16.3	27.4
1973	2,840	708	24.8	28.7
1974	2,976	756	26.2	46.3
1975-76	3,028	712	33.5	46.6
1976-77	2,768	775	38.1	46.2
1977-78	3,256	830	46.7	48.7
1978-79	n.a.	847	47.8	49.8
1979-80	n.a.	919	54.9	50.2
1980-81	n.a.	903	67.3	n.a.
1981-82	n.a.	861	69.9	n.a.

SOURCE: Bureau of the Census, Statistical Abstract of the United States, 1966 through 1983 (Washington, D.C.: annually).

a. Public and private elementary and secondary schools; private schools, estimated.
b. Data are for December of the fiscal years 1965-1968.
c. Based upon total enrollment in public schools in the fall of the fiscal year and total enrollment in private schools in the previous school year.
n.a.: not available

TABLE IV-10. EARNED DEGREES CONFERRED BY HIGHER EDUCATIONAL INSTITUTIONS IN MICHIGAN AND THE UNITED STATES, BY SEX AND LEVEL OF DEGREE: 1971-1982

Year	Bachelor's and first professional		Master's and second professional		Doctor's degrees (Ph.D., Ed.D. etc.)	
	Men	Women	Men	Women	Men	Women
			Michigan Publicly controlled			
1971-72	18,262	14,181	7,446	5,194	1,433	261
1972-73	19,238	15,089	7,276	5,218	1,429	306
1973-74	18,764	14,332	7,262	5,592	1,243	328
1974-75	17,721	14,015	7,850	5,920	1,295	311
1975-76	17,762	13,838	8,209	6,636	1,105	373
1976-77	15,888	13,335	8,194	6,818	1,096	361
1977-78	17,051	14,043	7,775	6,792	941	355
1978-79	16,654	14,547	7,356	6,515	965	408
1979-80	16,988	15,033	7,223	6,740	924	372
1980-81	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1981-82	16,978	16,012	6,803	6,485	963	427
			Privately controlled			
1971-72	4,481	2,578	601	408	16	0
1972-73	4,402	2,466	620	389	21	2
1973-74	4,727	2,589	591	372	10	1
1974-75	4,540	2,622	660	457	26	3
1975-76	4,982	2,799	666	494	15	5
1976-77	3,934	2,784	591	495	35	12
1977-78	4,748	3,038	565	426	37	5
1978-79	4,973	3,403	633	392	32	12
1979-80	4,842	3,431	666	427	31	7
1980-81	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1981-82	4,812	3,819	713	367	41	5
			Total			
1971-72	22,743	16,759	8,047	5,602	1,449	261
1972-73	23,640	17,545	7,896	5,607	1,450	308
1973-74	23,491	16,921	7,853	5,964	1,253	329
1974-75	22,251	16,637	8,510	6,377	1,321	314
1975-76	22,743	16,637	8,037	6,042	1,538	480
1976-77	19,822	16,119	8,785	7,313	1,131	373
1977-78	21,799	17,081	8,340	7,218	978	360
1978-79	21,627	17,950	7,989	6,907	997	420
1979-80	21,830	18,464	7,889	7,167	955	379
1980-81	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1981-82	21,790	19,831	7,516	6,852	922	422

TABLE IV-10. EARNED DEGREES CONFERRED BY HIGHER EDUCATIONAL INSTITUTIONS IN MICHIGAN AND THE UNITED STATES, BY SEX AND LEVEL OF DEGREE: 1971-1982 (cont.)

Year	Bachelor's and first professional		Master's and second professional		Doctor's degrees (Ph.D., Ed.D. etc.)	
	Men	Women	Men	Women	Men	Women
			United States Publicly controlled			
1971-72	352,824	270,374	96,468	71,481	18,577	3,205
1972-73	372,890	285,592	99,229	75,991	18,587	3,783
1973-74	383,117	297,812	101,722	83,782	17,897	3,920
1974-75	367,615	296,816	103,509	91,157	17,567	4,612
1975-76	367,854	299,037	105,968	101,241	16,902	4,861
1976-77	336,291	296,242	104,471	104,276	16,119	5,107
1977-78	354,137	306,454	99,206	103,685	15,085	5,386
1978-79	337,628	307,699	91,704	99,411	14,968	5,834
1979-80	337,329	314,697	88,551	98,948	14,555	6,053
1980-81	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1981-82	336,956	329,130	84,030	98,265	14,186	6,703
			Privately controlled			
1971-72	191,828	122,858	53,617	31,208	9,518	2,069
1972-73	195,471	126,754	55,771	33,534	9,988	2,432
1973-74	196,694	131,031	56,622	36,133	9,477	2,532
1974-75	190,039	133,452	58,606	40,379	9,252	2,655
1975-76	193,905	136,700	61,777	44,015	9,371	2,942
1976-77	158,940	132,337	62,418	45,572	8,910	2,987
1977-78	189,482	147,092	62,502	47,423	8,584	3,101
1978-79	187,684	151,947	60,570	48,202	8,509	3,353
1979-80	188,998	158,524	62,198	48,384	8,388	3,619
1980-81	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1981-82	188,631	170,313	61,502	51,749	8,038	3,780
			Total			
1971-72	544,652	393,232	150,085	102,689	28,095	5,274
1972-73	568,361	412,346	155,000	109,525	28,575	6,215
1973-74	579,811	428,843	158,344	119,915	27,374	6,452
1974-75	557,654	430,268	162,115	131,536	26,819	7,267
1975-76	561,759	435,745	167,745	145,256	26,273	7,803
1976-77	551,789	441,219	168,210	150,031	25,150	8,094
1977-78	543,619	453,546	161,708	151,108	23,669	8,487
1978-79	529,362	465,546	152,274	147,613	23,477	9,187
1979-80	526,327	473,221	150,749	147,332	22,943	9,672
1980-81	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1981-82	525,587	499,443	145,532	150,014	22,224	10,483

SOURCE: National Center of Education Statistics, *Earned Degrees Conferred, 1975-76, Summary Data* (Washington, D.C.: annually), and special release.

TABLE IV-11. OPENING FALL ENROLLMENTS BY TYPE OF MICHIGAN HIGHER EDUCATION INSTITUTIONS (HEADCOUNT): 1960-1983

Year	Public 4-year institutions	Public 2-year institutions	Private institutions	Total
		Headcount		
1960	107,658	27,220	36,398	171,285
1961	112,082	31,619	38,278	181,979
1962	119,834	34,356	39,700	193,890
1963	129,113	38,001	40,611	207,725
1964	143,114	46,123	43,472	232,709
1965	162,312	58,216	47,896	268,424
1966	176,487	69,496	49,462	295,445
1967	187,708	79,698	50,461	317,867
1968	198,419	95,965	50,777	345,161
1969	208,323	115,299	50,759	374,381
1970	217,802	125,553	52,348	395,703
1971	220,165	132,059	51,335	403,559
1972	218,667	137,634	50,658	406,959
1973	221,893	152,715	51,160	425,768
1974	229,627	173,643	55,273	458,543
1975	241,769	197,199	61,081	500,049
1976	236,831	187,622	60,372	484,825
1977	236,618	186,876	60,497	483,991
1978	236,035	187,649	62,810	486,494
1979	240,600	209,554	65,333	514,488
1980	242,907	207,816	66,216	516,939
1981	235,027	211,871	67,509	514,407
1982	226,385	213,204	69,807	509,396
1983	226,999	217,230	73,809	518,038

SOURCE: Michigan Department of Education, *Michigan Educational Statistics, 1977-78* (Lansing: 1978), Table 21 (1976); and special release.

TABLE IV-12. OPENING FALL ENROLLMENT (HEADCOUNT) IN INSTITUTIONS OF HIGHER EDUCATION IN MICHIGN, BY INSTITUTION: 1979-1983

Institution and city	1979	1980	1981	1982	1983
Public baccalaureate institutions					
Central Michigan University, Mt. Pleasant	17,779	18,269	17,653	17,132	17,259
Eastern Michigan University, Ypsilanti	18,865	19,323	18,766	18,078	18,880
Ferris State College, Big Rapids	10,596	11,112	11,261	11,008	10,767
Grand Valley State College, Allendale	7,142	6,984	6,699	6,366	6,710
Lake Superior State College, Sault Ste. Marie	2,309	2,501	2,559	2,494	2,820
Michigan State University, East Lansing	47,355	47,316	44,887	42,730	41,765
Michigan Technological University, Houghton	7,690	7,865	7,779	7,640	7,414
Northern Michigan University, Marquette	9,452	9,379	9,073	8,377	8,054
Oakland University, Rochester	11,729	12,006	11,644	11,721	12,084
Saginaw Valley College, University Center	3,818	4,285	4,324	4,370	4,612
University of Michigan, Ann Arbor	36,158	37,171	35,677	35,629	34,593
University of Michigan, Dearborn	6,406	6,291	6,575	6,390	6,399
University of Michigan, Flint	4,122	4,410	4,609	5,025	5,707
Wayne State University, Detroit	34,337	33,408	31,522	29,775	29,639
Western Michigan University, Kalamazoo	22,842	22,641	21,999	20,580	20,296
TOTAL	240,600	242,907	235,027	227,315	226,999
Public community and junior colleges					
Alpena Community College, Alpena	1,695	2,097	1,946	1,842	2,006
Bay de Noc Community College, Escanaba	1,480	1,531	1,621	1,626	1,616
C.S. Mott Community College, Flint	9,754	10,698	10,787	10,865	11,432
Delta College, University Center	9,585	9,996	10,013	10,279	10,807
Glen Oaks Community College, Centerville	1,224	1,224	1,173	1,244	1,280
Gogebic Community College, Ironwood	1,308	1,130	1,591	1,600	1,600

TABLE IV-12. OPENING FALL ENROLLMENT (HEADCOUNT) IN INSTITUTIONS OF HIGHER EDUCATION IN MICHIGAN, BY INSTITUTION: 1979-1983 (cont.)

Institution and city	1979	1980	1981	1982	1983
Public community and junior colleges (cont.)					
Grand Rapids Junior College, Grand Rapids	14,233[a]	8,871	8,905	9,207	9,254
Henry Ford Community College, Dearborn	17,191[b]	16,231	16,075	16,403	16,555
Highland Park Community College, Highland Park	2,323	2,654	2,706	2,625	2,623
Jackson Community College, Jackson	8,554	7,085	8,751	5,259	6,146
Kalamazoo Valley Community College, Kalamazoo	6,663	7,069	7,477	7,895	8,141
Kellogg Community College, Battle Creek	7,368	5,855	5,369	5,193	4,660
Kirtland Community College, Roscommon	1,075	1,075[c]	1,418	1,335	1,406
Lake Michigan College, Benton Harbor	3,301	3,602	3,013	2,977	3,025
Lansing Community College, Lansing	20,129	18,884	19,143	19,779	20,808
Macomb County Community College, Warren	25,619	28,429	28,090	28,174	31,152
Mid-Michigan Community College, Gladwin	1,660	2,007	1,582	1,573	1,693
Monroe County Community College, Monroe	1,994	2,151	2,470	2,702	2,937
Montcalm Community College, Sidney	1,650	1,544	1,223	1,237	1,361
Muskegon Community College, Muskegon	5,353	5,171	5,100	5,009	4,908
North Central Michigan College, Petoskey	1,836	1,881	1,965	1,681	1,832
Northwestern Michigan College, Traverse City	2,971	3,389	3,432	3,448	3,354
Oakland Community College, Bloomfield Hills	20,683	23,554	24,000	25,359	26,939
St. Clair County Community College, Port Huron	3,350	3,634	3,655	3,879	3,871
Schoolcraft College, Livonia	7,904	8,077	8,527	8,509	9,012
Southwestern Michigan College, Dowagiac	2,001	2,135	2,238	2,465	2,517
Washtenaw Community College, Ann Arbor	7,622	8,445	8,343	8,247	8,351
Wayne County Community College, Detroit	20,101	18,386	20,325	19,475	17,003
West Shore Community College, Scottville	927	1,011	933	1,081	1,141
TOTAL	209,554	207,816	211,871	210,968	217,230

TABLE IV-12. OPENING FALL ENROLLMENT (HEADCOUNT) IN INSTITUTIONS OF HIGHER EDUCATION IN MICHIGAN, BY INSTITUTION: 1979-1983 (cont.)

Institution and city	1979	1980	1981	1982	1983
Independent institutions					
Adrian College, Adrian	945	1,116	1,242	1,222	1,187
Albion College, Albion	1,781	1,860	1,876	1,742	1,656
Allan/Touro College, Southfield	--	--	20	--	1,640
Alma College, Alma	1,201	1,198	1,110	1,059	1,004
Andrews University, Berrien Springs	2,983	3,018	3,083	2,851	2,638
Aquinas College, Grand Rapids	2,163	2,529	2,753	2,743	2,279
Baker Jr. College of Business, Flint	1,171	1,311	1,427	1,762	1,866
Calvin College, Grand Rapids	3,988	4,058	3,919	3,807	3,926
Calvin Theological Seminary, Grand Rapids	209	190	185	210	225
Center for Creative Studies	1,034	1,086	1,103	1,113	974
Central Bible College	--	--	--	--	54
Center for Humanistic Studies, Detroit	--	--	55	69	63
Chapin Jr. College of Business, Oxford	--	--	9	16	n.a.
Chrysler Institute of Technology	--	--	--	--	184
Cleary College, Ypsilanti	586	765	416	1,006	862
Concordia Lutheran Junior College, Ann Arbor	552	526	550	540	509
Cranbrook Academy of Art, Bloomfield Hills	158	148	150	140	140
Davenport College of Business, Grand Rapids	2,570	3,047	4,265	4,511	4,684
D'etre University	--	--	--	--	52
Detroit Baptist Theology Seminary	--	--	--	--	35
Detroit College of Business, Dearborn	2,198	2,368	2,789	2,965	3,425
Detroit College of Law, Detroit	816	848	874	877	983
Duns Scotus College, Southfield	35	n.a.	n.a.	n.a.	n.a.
General Motors Institute, Flint	2,241	2,327	2,389	2,433	2,494
Grace Bible College, Grand Rapids	198	176	241	170	145
Grand Rapids School of Bible, Grand Rapids	583	532	n.a.	n.a.	n.a.
Great Lakes Bible College, Lansing	206	182	178	176	152
Grand Rapids Baptist, Grand Rapids	1,144	1,216	1,132	1,077	960
Hillsdale College, Hillsdale	1,035	1,035	1,043	1,044	984

TABLE IV-12. OPENING FALL ENROLLMENT (HEADCOUNT) IN INSTITUTIONS OF HIGHER EDUCATION IN MICHIGAN, BY INSTITUTION: 1979-1983 (cont.)

Institution and city	1979	1980	1981	1982	1983
Independent institutions (cont.)					
Walsh College of Accountancy and Business Administration, Troy	1,583	1,583[c]	1,707	1,388	1,719
St. Cyril and Methodius Seminary, Orchard Lake	--	--	73	92	35
William Tyndal College	--	--	--	--	287
Yeshivath Beth Yehudah, Oak Park	--	--	64	231	n.a.
Western Theological Seminary, Holland	124	104	130	122	135
TOTAL	64,333	66,216	67,509	67,673	64,206

SOURCE: Michigan Department of Education, special release.

NOTE: Enrollment statistics are based on actual headcounts of students enrolled in degree programs, unclassified students, and graduate students.

a. There was a surge in part-time enrollment.
b. 1978 data, 1979 data not available.
c. 1979 data, 1980 data not available.
n.a.: not available

TABLE IV-13. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1983: EXPENSE FOR 1983-1984 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE)

Institution	Tuition and fees	Room and board[a]	Books and personal[b]	Travel[c]	Total
Public Colleges and Universities					
Central Michigan Univ.					
Mt. Pleasant	$1,507	$2,120	$775	$375	$4,777
Eastern Michigan Univ.					
Ypsilanti	1,365	2,270	775	375	4,785
Ferris State College					
Big Rapids	1,629	2,316	775	375	5,095
Grand Valley State College					
Allendale	1,502	2,470	775	375	5,122
Lake Superior State College					
Sault Ste. Marie	1,455	2,448	775	375	5,053
Michigan State University					
East Lansing					
Freshman, Sophomore	1,735	2,281	775	375	5,166
Junior, Senior	1,915	2,281	775	375	5,346
Michigan Technological Univ.					
Houghton	1,512	2,336	775	375	4,998
Northern Michigan University					
Marquette	1,524	2,326	775	375	5,000
Oakland Univ., Rochester					
Freshman, Sophomore	1,271	2,486	775	375	4,907
Junior, Senior	1,473	2,486	775	375	5,109
Saginaw Valley State College					
University Center	1,488	2,256	775	375	4,894
Univ. of Michigan, Ann Arbor					
Freshman, Sophomore	2,025	2,648	775	375	5,823
Junior, Senior	2,261	2,648	775	375	6,059
Univ. of Michigan/Dearborn					
Dearborn	1,528	1,700	775	675	4,678
University of Michigan/Flint					
Flint	1,356	1,700	775	675	4,506
Wayne State Univ., Detroit					
Freshman, Sophomore	1,760	1,700	775	675	4,910
Junior, Senior	2,060	1,700	775	675	5,210
Western Michigan University					
Kalamazoo					
Freshman, Sophomore	1,397	2,138	775	375	4,685
Junior, Senior	1,521	2,138	775	375	4,809
Nonpublic colleges and universities					
Adrian College, Adrian	5,376	2,022	775	375	8,548
Albion College, Albion	5,850	2,630	775	375	9,630
Allan/Touro College,					
Southfield	3,205	1,700	775	675	6,355
Alma College, Alma	6,072	2,516	775	375	9,738
Andrews University					
Berrien Springs					
Undergraduate	5,230	2,730	775	375	9,110
Graduate	3,960	2,730	775	375	7,840
Aquinas College,					
Grand Rapids	4,790	2,436	775	375	8,376
Baker Jr. College of Bus.					
Flint	2,340	1,700	775	675	5,490

TABLE IV-13. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1983: EXPENSE FOR 1983-1984 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and board[a]	Books and personal[b]	Travel[c]	Total
Nonpublic colleges and universities					
Calvin College					
Grand Rapids	$4,280	$1,980	$775	$375	$7,410
Center for Creative Studies					
College of Art and Design					
Detroit	4,700	1,700	775	675	7,850
Center for Humanistic Studies					
Detroit	5,200	1,700	775	675	8,350
Chapin Jr. College of Bus.					
Oxford	1,800	1,700	775	675	4,950
Cleary College, Ypsilanti	2,835	1,700	775	675	5,985
Concordia Coll., Ann Arbor	3,149	2,450	775	375	6,749
Cranbrook Academy of Art					
Bloomfield Hills	5,060	2,400	775	375	8,610
Davenport College of Bus.					
Grand Rapids, Lansing					
Kalamazoo	3,888	2,250	775	375	7,288
D'etre Institute of Arts &					
Sciences, Grosse Pointe	3,900	1,700	775	675	7,050
Detroit College of Business					
Dearborn	2,789	1,700	775	675	5,939
Detroit College of Law					
Detroit					
Day	3,800	1,700	775	675	6,950
Evening	2,850	1,700	775	675	6,000
General Motors Institute					
Flint	2,464	1,520	620	300	4,904
Grace Bible College					
Grand Rapids	1,800	2,100	775	375	5,050
Grand Rapids Baptist College					
Grand Rapids	3,320	2,260	775	375	6,730
Hillsdale Coll., Hillsdale	5,720	2,680	775	375	9,550
Hope College, Holland	5,410	2,410	775	375	8,970
Jordan Coll., Cedar Springs	2,300	1,600	775	375	5,050
Kalamazoo Coll., Kalamazoo	6,882	2,574	775	375	10,606
Kendall School of Design					
Grand Rapids	3,675	1,700	775	675	6,825
Lawrence Inst. of Technology					
Southfield					
Undergraduate	2,100	1,700	775	675	5,250
Graduate	2,310	1,700	775	675	5,460
Lewis College of Business[d]					
Detroit	5,661	2,550	1,163	1,013	10,387
Madonna College, Livonia					
Undergraduate	1,970	2,230	775	375	5,350
Graduate	2,420	2,230	775	375	5,800
Marygrove College, Detroit					
Undergraduate	4,043	2,430	775	375	7,623
Graduate	2,358	2,430	775	375	5,938
Mercy College of Detroit					
Detroit	3,390	1,950	775	375	6,490

TABLE IV-13. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1983: EXPENSE FOR 1983-1984 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and Board[a]	Books and personal[b]	Travel[c]	Total
Nonpublic colleges and universities (cont.)					
Michigan Christian Jr. College Rochester	$2,610	$2,110	$775	$375	$5,870
Muskegon Business College Muskegon	2,280	1,700	775	675	5,430
Nazareth College Nazareth	5,170	2,530	775	375	8,850
Northwood Institute, Midland	4,170	2,340	775	375	7,660
Olivet College, Olivet	5,080	2,350	775	375	8,580
Reformed Bible College Detroit	2,700	2,100	775	375	5,950
Sacred Heart Seminary Detroit	2,600	1,500	775	375	5,250
Shaw College of Detroit Detroit	3,900	1,700	775	675	7,050
St. Mary's College Orchard Lake	2,290	2,225	775	375	5,665
Siena Heights College, Adrian					
Undergraduate	3,720	2,200	775	375	7,070
Graduate	3,096	2,200	775	375	6,446
Spring Arbor College Spring Arbor	4,590	2,008	775	375	7,748
Suomi College, Hancock	5,400	2,300	775	375	8,850
Thomas Cooley Law School[d] Lansing	4,215	2,550	1,163	1,013	8,941
University of Detroit Detroit	5,070	2,560	775	375	8,780
University of Detroit Detroit Graduate Programs					
College: Law, day	5,012	2,560	775	375	8,722
College: General graduate	3,114	2,560	775	375	6,824
College: Dentistry	8,300	2,560	775	375	12,010
Walsh College/Act. and Bus. Administration, Detroit					
Undergraduate	2,145	1,700	775	675	5,295
Graduate	1,724	1,700	775	675	4,874
William Tyndale College Detroit	2,323	2,200	775	675	5,973

TABLE IV-13. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1983: EXPENSE FOR 1983-1984 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and Board[a]	Books and personal[b]	Travel[c]	Total
		Public Community Colleges			
Alpena Comm. College					
Alpena					
Resident of district	$660	$1,700	$775	$675	$3,810
Non-resident of district	960	2,125	775	375	4,235
Bay De Noc Community College					
Escanaba					
Resident of district	791	1,700	775	675	3,941
Non-resident of district	1,070	2,258	775	375	4,478
Delta College, Univ. Center					
Resident of district	857	1,700	775	675	4,007
Non-resident of district	1,523	1,700	775	675	4,673
C.S. Mott Community College					
Flint					
Resident of district	795	1,700	775	675	3,945
Non-resident of district	981	1,700	775	675	4,131
Glen Oaks Community College					
Centreville					
Resident of district	704	1,700	775	675	3,854
Non-resident of district	952	1,700	775	675	4,102
Gogebic Comm. College					
Ironwood					
Resident of district	630	1,700	775	675	3,780
Non-resident of district	960	1,700	775	675	4,110
Grand Rapids Jr. College					
Grand Rapids					
Resident of district	888	1,700	775	675	4,038
Non-resident of district	1,477	1,700	775	675	4,627
Henry Ford Community College					
Dearborn					
Resident of district	960	1,700	775	675	4,110
Non-resident of district	1,332	1,700	775	675	4,482
Highland Park Comm. College					
Highland Park					
Resident of district	650	1,700	775	675	3,800
Non-resident of district	950	1,700	775	675	4,100
Jackson Comm. Coll., Jackson					
Resident of district	868	1,700	775	675	4,018
Non-resident of district	1,116	1,700	775	675	4,266
Kalamazoo Valley Comm. College					
Kalamazoo					
Resident of district	651	1,700	775	675	3,801
Non-resident of district	1,305	1,700	775	675	4,452
Kellogg Community College					
Battle Creek					
Resident of district	667	1,700	775	675	3,817
Non-resident of district	1,085	1,700	775	675	4,235

TABLE IV-13. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1983: EXPENSE FOR 1983-1984 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and Board[a]	Books and personal[b]	Travel[c]	Total
Public Community Colleges (cont.)					
Kirtland Community College					
Roscommon					
Resident of district	623	1,700	775	675	3,773
Non-resident of district	803	1,700	775	675	3,953
Lake Michigan College					
Benton Harbor					
Resident of district	710	1,700	775	675	3,860
Non-resident of district	950	1,700	775	675	4,100
Lansing Comm. Coll. Lansing					
Resident of district	690	1,700	775	675	3,840
Non-resident of district	1,005	1,700	775	675	4,155
Macomb County Comm. College					
Warren					
Resident of district	868	1,700	775	675	4,018
Non-resident of district	1,441	1,700	775	675	4,591
Mid-Michigan Comm. College					
Harrison					
Resident of district	630	1,700	775	675	3,780
Non-resident of district	940	1,700	775	675	4,090
Monroe County Comm. College					
Monroe					
Resident of district	590	1,700	775	675	3,740
Non-resident of district	860	1,700	775	675	4,010
Montcalm Comm. Coll., Sidney					
Resident of district	774	1,700	775	675	3,924
Non-resident of district	984	1,700	775	675	4,134
Muskegon Comm. College					
Muskegon					
Resident of district	713	1,700	775	675	3,863
Non-resident of district	992	1,700	775	675	4,142
North Central Michigan College					
Petoskey					
Resident of district	736	1,700	775	675	3,886
Non-resident of district	916	2,430	775	375	4,496
Northwestern Michigan College					
Traverse City					
Resident of district	1,035	1,700	775	675	4,185
Non-resident of district	1,659	2,220	775	375	5,029
Oakland Comm. College					
Bloomfield Hills					
Resident of district	652	1,700	775	675	3,802
Non-resident of district	962	1,700	775	675	4,112

TABLE IV-13. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1983: EXPENSE FOR 1983-1984 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and Board[a]	Books and personal[b]	Travel[c]	Total
Public Community Colleges (cont.)					
St. Clair Comm. College					
Port Huron					
Resident of district	728	1,700	775	675	3,878
Non-resident of district	1,178	1,700	775	675	4,328
Schoolcraft Coll., Livonia					
Resident of district	816	1,700	775	675	3,966
Non-resident of district	1,095	1,700	775	675	4,245
Southwestern Michigan Coll.					
Dowagiac					
Resident of district	754	1,700	775	675	3,904
Non-resident of district	909	1,700	775	675	4,059
Washtenaw Comm. College					
Ann Arbor					
Resident of district	720	1,700	775	675	3,870
Non-resident of district	1,230	1,700	775	675	4,380
Wayne County Comm. College					
Detroit					
Resident of district	720	1,700	775	675	3,870
Non-resident of district	1,020	1,700	775	675	4,170
West Shore Comm. Coll.					
Scottville					
Resident of district	709	1,700	775	675	3,859
Non-resident of district	1,069	1,700	775	675	4,219
Scholarship Eligible Colleges Only					
Non-Degree Granting Non-Profit Eligible Institutions					
Blodgett Memorial Medical Centers					
School of Nursing, Grand Rapids					
1st year[e]	1,344	1,500	750	650	4,244
2nd & 3rd years	1,550	1,889	861	750	5,050
Bronson Methodist Hospital					
School of Nursing (W. MI)					
Kalamazoo					
1st year	2,230	1,889	861	417	5,397
2nd year	1,390	1,889	861	417	4,557
3rd year	850	1,133	450	250	2,683
Butterworth Hospital School					
of Nursing (G.R.J.C.)					
1st year	1,064	1,500	750	350	3,664
2nd and 3rd year	1,237	1,889	861	417	4,404
Detroit Receiving Hospital					
School of Radiologic Technology					
Detroit	325	1,700	775	675	3,475
Detroit Institute of Commerce					
Detroit	3,035	1,700	775	675	6,185
Henry Ford Hospital School					
of Nursing (U of M - Dearborn)					
Detroit					
1st year	2,407	1,588	947	458	5,400
2nd year	1,601	1,300	775	375	4,051

TABLE IV-13. ESTIMATE OF MICHIGAN RESIDENT STUDENT EXPENSES AT MICHIGAN INSTITUTIONS OF HIGHER EDUCATION AS OF 1 APRIL 1983: EXPENSE FOR 1983-1984 ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) (cont.)

Institution	Tuition and fees	Room and Board[a]	Books and personal[b]	Travel[c]	Total
Scholarship Eligible Colleges Only (cont.)					
Non-Degree Granting Non-Profit Eligible Institutions					
Hurley Medical Center School of Nursing Flint					
1st year	1,391	1,700	775	375	4,241
2nd year	1,283	1,700	775	375	4,133
Mercy Central School of Nursing (Aquinas College) Grand Rapids					
1st year	3,767	1,889	861	417	6,934
2nd year	2,681	1,889	861	417	5,848
Mercy School of Nursing Detroit					
1st year	2,375	1,889	861	417	5,542
2nd year	2,375	1,889	861	417	5,542
Saginaw Bus. Institute Saginaw	2,529	1,700	775	675	5,679
Shapero School of Nursing of Sinai Hospital Detroit	855	2,267	1,033	900	5,055
South Central Michigan School of Practical Nursing (Kellogg C.C.) Coldwater	3,965	2,077	947	825	7,814
St. Joseph Hospital School of Radiologic Technology Mt. Clemens	300	2,267	1,033	900	4,500

Room and Board is based upon length of program. Most institutions with dormitory facilities do not provide meals. Students are charged for room only and must purchase meals at the cafeteria. For these institutions the base figure of $1,700 was used to determine room and board.

Travel allowance is based upon dormitory facilities and length of program.

Reported to S.F.A.S. - Department of Education as of 15 March reporting date.

SOURCE: Michigan Department of Education, special release.

NOTE: Figures were developed by the Michigan Department of Education office of student financial assistance services for use in the scholarship and tuition grant programs under their jurisdiction.

a. A standard of $1,700 is assumed at institutions where the dormitories can accommodate less than 10 percent of the student body.

b. A standard of $775 is assumed at most institutions.

c. A standard of $375 is assumed at institutions where the dormitories can accommodate 10 percent or more of the student body; a standard of $675 is assumed where the dormitories can accommodate less than 10 percent.

d. Figures for Lewis College of Business, Detroit, and Cooley Law School, Lansing, represent 12 month budget figures.

e. Tuition based upon students attending Blodgett and Grand Rapids Junior College. For students attending Calvin College, the college must monitor for the higher tuition charges.

TABLE IV-12. OPENING FALL ENROLLMENT (HEADCOUNT) IN INSTITUTIONS OF HIGHER EDUCATION IN MICHIGAN, BY INSTITUTION: 1979-1983 (cont.)

Institution and city	1979	1980	1981	1982	1983
Independent institutions (cont.)					
Hope College, Holland	2,355	2,464	2,458	2,530	2,379
John Wesley College at Owosso, Owosso	66	n.a.	n.a.	n.a.	n.a.
Jordon College, Cedar Springs	914	683	654	1,025	1,464
Kalamazoo College, Kalamazoo	1,438	1,452	1,367	1,234	1,126
Kendall School of Design	416	482	505	577	646
Lawrence Institute of Technology, Southfield	4,991	5,260	5,703	5,868	5,332
Lewis College of Business	455	487	609	515	647
Madonna College, Livonia	3,131	3,213	3,385	3,409	3,742
Marygrove College, Detroit	958	1,025	1,149	1,189	1,159
Mercy College of Detroit, Detroit	2,281	2,484	2,119	2,106	2,264
Merrill-Palmer Institute, Detroit	97	--	--	--	--
Michigan Christian Junior College, Rochester	262	338	319	343	362
Muskegon Business College, Muskegon	994	1,125	1,175	1,253	1,450
Nazareth College, Nazareth	524	531	528	571	569
Northwood Institute, Midland	1,789	1,945	1,929	1,846	1,862
Olivet College, Olivet	628	668	637	561	606
Reformed Bible College, Grand Rapids	234	209	206	222	200
Sacred Heart Seminary, Detroit	108	142	172	198	195
Saint John's Seminary	141	149	211	190	108
St. Mary's College, Orchard Lake	205	185	216	195	220
Shaw College at Detroit, Detroit	603	632	655	456	--
Siena Heights College, Adrian	1,327	1,420	1,478	1,404	1,288
Spring Arbor College, Spring Arbor	1,048	1,086	1,011	975	1,025
Suomi College, Hancock	440	578	510	558	592
Thomas Cooley Law School, Lansing	1,079	1,052	1,045	1,115	1,159
University of Detroit, Detroit	7,025	6,397	6,186	5,967	5,512

TABLE IV-14. EDUCATIONAL AND GENERAL REVENUES OF MICHIGAN PUBLIC FOUR-YEAR INSTITUTIONS OF HIGHER EDUCATION: FISCAL YEARS 1981-1983

(In thousands of dollars)

Institution		Tuition and fees	State appropriations	Sales and service		Other	Total
				Educational activities	Auxiliary enterprises		
Central Michigan University	1981	23,399	28,121	2,297	17,169	4,527	75,513
	1982	25,649	29,028	2,173	18,425	5,054	80,329
	1983	28,586	29,359	2,128	19,559	7,555	87,187
Eastern Michigan University	1981	15,018	32,934	813	12,396	8,045	69,206
	1982	18,416	34,801	813	13,414	8,496	75,940
	1983	20,787	35,795	892	14,118	11,152	82,744
Ferris State College	1981	12,519	20,734	1,931	14,765	7,573	57,522
	1982	15,009	22,189	1,912	15,454	7,400	61,964
	1983	15,974	21,067	1,495	17,052	7,337	62,925
Grand Valley State College	1981	5,374	12,622	678	3,250	4,454	26,378
	1982	6,227	12,683	624	3,437	4,445	27,416
	1983	6,714	13,221	791	3,035	6,203	29,964
Lake Superior State College	1981	2,193	5,614	16	3,230	1,331	12,384
	1982	2,644	5,640	13	3,471	1,503	13,271
	1983	3,054	5,705	11	3,657	2,128	14,555
Michigan State University	1981	68,434	138,529	15,469	71,070	82,567	376,069
	1982	70,939	142,329	15,501	73,723	99,134	401,626
	1983	77,511	150,472	17,611	77,928	97,663	421,185
Michigan Technical University	1981	10,248	18,843	756	10,116	10,649	50,612
	1982	11,595	20,172	766	10,464	13,692	56,689
	1983	12,883	17,558	761	10,751	14,060	56,013
Northern Michigan University	1981	8,616	20,162	1,694	9,026	3,887	43,385
	1982	9,337	21,530	2,045	8,790	4,051	45,753
	1983	10,013	20,392	2,363	8,658	7,089	48,515
Oakland University	1981	10,449	18,761	1,254	9,952	6,619	47,035
	1982	12,378	19,339	1,374	11,735	6,589	51,415
	1983	14,013	19,463	1,610	12,627	7,646	55,449

TABLE IV-14. EDUCATIONAL AND GENERAL REVENUES OF MICHIGAN PUBLIC FOUR-YEAR INSTITUTIONS OF HIGHER EDUCATION: FISCAL YEARS 1981-1983 (cont.)

(In thousands of dollars)

Institution		Tuition and fees	State appropriations	Sales and service: Educational activities	Sales and service: Auxiliary enterprises	Other	Total
Saginaw Valley College	1981	3,225	6,346	195	1,618	1,261	12,645
	1982	4,331	6,884	235	1,799	1,185	14,434
	1983	4,454	7,192	228	1,904	1,710	15,488
University of Michigan[a]	1981	100,126	157,418	22,259	48,325	361,668	689,796
	1982	117,748	159,854	22,981	51,339	389,394	741,316
	1983	133,753	160,765	23,934	57,322	420,953	796,727
Wayne State University	1981	40,517	89,450	4,347	11,683	37,898	183,895
	1982	43,263	99,362	4,480	12,214	40,991	200,310
	1983	46,458	97,708	5,333	13,148	41,219	203,866
Western Michigan University	1981	21,970	44,454	3,106	21,756	9,884	101,170
	1982	25,716	45,295	3,438	22,633	9,419	106,501
	1983	26,921	44,963	3,769	22,563	11,228	109,444
TOTAL	1981	322,088	593,988	54,815	234,356	540,363	1,745,610
	1982	363,252	619,206	56,355	246,898	591,253	1,876,964
	1983	401,211	623,660	60,926	262,322	635,943	1,984,062

SOURCE: Michigan Department of Education, special release.

a. Figures include Ann Arbor, Dearborn, and Flint operations.

TABLE IV-15. EDUCATIONAL AND GENERAL EXPENDITURES OF MICHIGAN PUBLIC FOUR-YEAR INSTITUTIONS OF HIGHER EDUCATION: FISCAL YEARS 1981 - 1983

(In thousands of dollars)

Institution		Instruction	Research	Public service	Plant operation and maintenance	Auxiliary expeditures	Total[a]
Central Michigan University	1981	30,310	279	1,759	4,547	16,492	74,702
	1982	32,246	287	1,816	4,905	17,557	79,748
	1983	35,093	325	1,980	5,250	20,184	89,447
Eastern Michigan University	1981	26,326	410	3,950	6,260	11,887	70,848
	1982	28,092	419	4,360	6,844	12,249	75,510
	1983	29,218	553	4,494	7,267	12,820	80,741
Ferris State College	1981	18,897	13	179	4,463	15,528	57,185
	1982	21,628	61	169	4,102	16,025	59,176
	1983	22,294	91	197	4,576	16,823	62,879
Grand Valley State College	1981	9,823	98	2,025	2,657	4,003	27,041
	1982	9,917	117	2,282	2,558	3,801	27,398
	1983	9,862	104	2,184	3,118	3,427	29,786
Lake Superior State College	1981	3,725	0	179	1,445	3,430	11,830
	1982	4,053	12	146	1,503	3,663	12,818
	1983	3,924	0	129	1,638	3,750	13,745
Michigan State University	1981	128,008	54,108	36,643	23,645	66,577	362,792
	1982	133,109	57,879	39,141	25,147	70,245	389,143
	1983	136,493	60,685	38,625	24,606	74,602	401,521
Michigan Technical University	1981	15,392	6,135	788	4,957	10,258	50,019
	1982	16,968	6,496	744	5,966	9,664	55,737
	1983	17,930	7,308	715	4,744	12,015	59,191
Northern Michigan University	1981	13,854	174	2,389	4,304	9,788	42,801
	1982	14,755	104	2,388	4,754	9,895	45,648
	1983	14,903	79	2,468	5,588	9,254	48,042

TABLE IV-15. EDUCATIONAL AND GENERAL EXPENDITURES OF MICHIGAN PUBLIC FOUR-YEAR INSTITUTIONS OF HIGHER EDUCATION: FISCAL YEARS 1981 - 1983 (cont.)

(In thousands of dollars)

Institution		Instruction	Research	Public service	Plant operation and maintenance	Auxiliary expenditures	Total[a]
Oakland University	1981	16,503	2,182	1,961	3,533	10,015	46,740
	1982	17,444	2,152	1,066	3,904	12,156	50,253
	1983	18,190	2,346	881	5,075	12,966	54,724
Saginaw Valley College	1981	4,596	72	41	1,134	1,681	12,690
	1982	5,513	88	155	1,272	1,881	14,795
	1983	5,572	92	189	1,214	1,958	15,614
University of Michigan[b]	1981	162,956	98,869	6,835	45,489	47,138	660,064
	1982	170,125	99,874	8,172	47,104	50,606	719,057
	1983	179,940	103,185	8,978	52,136	57,331	825,215
Wayne State University	1981	83,879	16,976	6,052	21,477	14,726	191,629
	1982	84,203	16,890	6,745	23,546	13,868	196,202
	1983	78,258	18,006	8,371	23,417	12,099	197,576
Western Michigan University	1981	36,861	954	3,885	7,695	23,295	98,820
	1982	39,194	963	3,992	8,852	24,463	104,654
	1983	40,614	847	3,592	9,107	24,908	111,318
TOTAL	1981	551,130	180,270	66,686	131,606	234,818	1,707,161
	1982	577,247	185,342	71,176	140,462	246,073	1,830,139
	1983	592,286	193,621	72,803	147,736	262,137	1,989,799

SOURCE: Michigan Department of Education, special release.

a. Also includes academic support, student services, institutional support, scholarships and fellowships.
b. Ann Arbor, Dearborn and Flint.

V. THE LABOR MARKET

The civilian work force is the sum of the unemployed, those workers involved in labor disputes, and total employment (wage and salary workers, farm workers, self-employed unpaid family workers, and domestics). The unemployment rate is the number of unemployed divided by the total labor force and is usually stated as a percentage. The work force includes all persons aged 16 years and older who are classified as employed or unemployed. Those not in the labor force are without a job and are not looking for work for reasons of health, incarceration, college status, retirement, youth, voluntary idleness, involuntary idleness but not looking for a job, and so forth.

Civilian work force, employment, and unemployment figures are estimated from the Current Population Survey (CPS), a sample of U.S. households, not a complete count. The CPS, selected so as to be representative of the total population, is conducted each month by the Bureau of the Census. The results are turned over to the Bureau of Labor Statistics for analysis and release. For the ten largest states, of which Michigan is one, monthly labor force, employment, and unemployment figures come directly from the CPS. For the District of Columbia and the other 40 states, other procedures are used.

Sampling error is the error associated with using a sample of households rather than a complete census. The relative error varies inversely with the size of the statistics being estimated and with the size of the sample. Tables of sampling errors for the various statistics shown in Table V-1 through V-14 may be consulted in BLS publications dealing with geographic profiles of employment and unemployment, published annually.

Job data are estimated from samples of employers taken monthly by the Michigan Employment Security Commission and similar agencies in other states and the District of Columbia. MESC estimates are made each month by industry group for the state, the major labor market areas (these coincide with the Standard Metropolitan Statistical Areas, for the most part), for small labor markets, and for the Upper Peninsula. There is no measure of the sampling error in job data (Tables V-15 through V-18). Each year the job figures are revised on the basis of the March benchmark. The MESC carefully compares the employer sample with a tabulation of jobs reported by all employers covered under the regular state unemployment insurance system in order to make adjustments in its procedures.

The chapters dealing with retail trade, wholesale trade, and services provide greater detail on jobs for those sectors; however, their figures are developed differently and pertain to the mid-March pay period only. They are helpful guides as to which specific kinds of retailing, wholesaling, and services provide the most and fewest jobs. Also, the industry chapters in this *Abstract* have tabulations of licenses issued in various professions. In using those figures, the reader should bear in mind that, for one reason or another, not all license holders are practicing those professions.

Table V-20 and V-21 are included because a number of analysts use this data. It must be emphasized that many establishments, such as "mom-and-pop" restaurants, grocery stores, and motels, are not covered under the state's unemployment insurance program. Coverage is least in agriculture, services, and retail trade. It is virtually complete in manufacturing.

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TABLE V-1. CIVILIAN LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN MICHIGAN AND THE UNITED STATES: 1950-1983

(Labor force, employment, and unemployment in thousands)

Year	Michigan				United States			
	Labor force	Employment	Unemployment Number	Unemployment Rate	Labor force	Employment	Unemployment Number	Unemployment Rate
	Original Series[a]							
1950	2,685	2,577	108	4.0	62,208	58,918	3,288	5.3
1951	2,773	2,661	112	4.0	62,017	59,961	2,055	3.3
1952	2,790	2,675	115	4.1	62,138	60,250	1,883	3.0
1953	2,941	2,862	79	2.7	63,015	61,179	1,834	2.9
1954	2,928	2,720	208	7.1	63,643	60,109	3,532	5.5
1955	2,916	2,808	108	3.7	65,023	62,170	2,852	4.4
1956	2,934	2,744	190	6.5	66,552	63,799	2,750	4.1
	Current series							
1956	3,141	2,923	218	6.9	66,552	63,799	2,750	4.1
1957	3,076	2,874	202	6.6	66,929	64,071	2,859	4.3
1958	3,045	2,627	418	13.7	67,639	63,036	4,602	6.8
1959	2,968	2,718	250	8.4	68,369	64,630	3,740	5.5
1960	2,959	2,760	199	6.7	69,628	65,778	3,852	5.5
1961	2,954	2,655	299	10.1	70,459	65,746	4,714	6.7
1962	2,939	2,734	205	7.0	70,614	66,702	3,911	5.5
1963	2,967	2,801	166	5.6	71,833	67,762	4,070	5.7
1964	3,071	2,923	148	4.8	73,091	69,305	3,786	5.2
1965	3,211	3,086	125	3.9	74,455	71,088	3,366	4.5
1966	3,369	3,252	117	3.5	75,770	72,895	2,875	3.8
1967	3,450	3,296	154	4.5	77,347	74,372	2,975	3.8
1968	3,501	3,350	151	4.3	78,737	75,920	2,817	3.6
1969	3,594	3,449	145	4.0	80,734	77,902	2,832	3.5
1970	3,590	3,350	241	6.7	82,771	78,678	4,093	4.9
1971	3,623	3,347	276	7.6	84,382	79,367	5,016	5.9
1972	3,694	3,437	258	7.0	87,034	82,153	4,882	5.6
1973	3,802	3,578	223	5.9	89,429	85,064	4,365	4.9
1974	3,879	3,591	288	7.4	91,949	86,794	5,156	5.6
1975	3,891	3,405	486	12.5	93,775	85,846	7,929	8.5
1976	3,989	3,617	373	9.4	96,158	88,752	7,406	7.7
1977	4,112	3,775	336	8.2	99,009	92,017	6,991	7.1
1978	4,194	3,905	289	6.9	102,251	96,048	6,202	6.1
1979	4,312	3,977	335	7.8	104,962	98,824	6,137	5.8
1980	4,290	3,756	534	12.4	106,940	99,303	7,637	7.1
1981	4,309	3,780	529	12.3	108,670	100,397	8,273	7.6
1982	4,279	3,617	661	15.5	110,204	99,526	10,678	9.7
1983	4,303	3,693	610	14.2	111,550	110,834	10,717	9.6

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, Employment and Earnings (Washington, D.C.: monthly), January 1984, Table A-1.

a. For Michigan there is a break in the comparability of the data in 1956. For the U.S. there is not.

TABLE V-2. ADULT CIVILIAN LABOR FORCE, LABOR FORCE PARTICIPATION RATE, AND CIVILIAN EMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES, BY RACE AND SEX, ANNUAL AVERAGES OF MONTHLY ESTIMATES FROM THE CURRENT POPULATION SURVEY: 1972-1973 AND 1975-1982

Race, sex, and age	1972	1973	1975	1976	1977	1978	1979	1980	1981	1982[a]
Detroit SMSA										
Civilian labor force (000)										
White										
Men 20 years and over	852	840	892	907	938	124	927	914	906	965
Women 20 years and over	430	435	503	511	535	548	582	594	597	684
Negro & other races										
Men 20 years and over	149	158	167	149	160	173	192	200	152	176
Women 20 years and over	107	106	113	118	122	150	159	172	137	147
Participation rate										
White										
Men 20 years and over	82.7	83.3	82.2	82.2	83.4	82.2	82.8	81.2	82.5	79.0
Women 20 years and over	38.7	39.4	42.4	43.1	44.7	45.4	48.1	48.8	49.2	52.0
Negro & other races										
Men 20 years and over	71.6	74.9	73.2	69.0	69.9	75.5	78.0	67.7	69.8	66.7
Women 20 years and over	45.5	45.5	44.0	44.0	45.7	53.8	55.0	51.2	48.1	47.6
Civilian employment (000)										
White										
Men 20 years and over	817	814	797	852	898	847	887	822	831	840
Women 20 years and over	404	416	455	467	495	516	545	541	536	600
Negro & other races										
Men 20 years and over	133	143	131	135	143	155	162	142	115	113
Women 20 years and over	96	97	97	102	106	127	132	136	108	102
Michigan										
Civilian labor force (000)										
White										
Men 20 years and over	1,926	1,929	1,954	1,973	2,025	2,021	2,027	2,034	2,058	2,195
Women 20 years and over	1,040	1,063	1,154	1,203	1,233	1,250	1,320	1,363	1,390	1,589
Negro & other races										
Men 20 years and over	200	216	223	211	225	242	271	257	215	236
Women 20 years and over	140	151	153	158	170	206	222	209	181	203

TABLE V-2. ADULT CIVILIAN LABOR FORCE, LABOR FORCE PARTICIPATION RATE, AND CIVILIAN EMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITIAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES, BY RACE AND SEX, ANNUAL AVERAGES OF MONTHLY ESTIMATES FROM THE CURRENT POPULATION SURVEY: 1972-1973 AND 1975-1982 (cont.)

Race, sex, and age	1972	1973	1975	1976	1977	1978	1979	1980	1981	1982[a]
					Michigan (cont.)					
White					Participation rate					
Men 20 years and over	82.3	82.2	81.8	81.1	81.8	80.6	80.7	79.6	80.1	77.2
Women 20 years and over	41.1	42.1	44.4	46.0	46.7	46.3	48.4	49.6	50.0	52.2
Negro & other races										
Men 20 years and over	75.5	76.6	73.1	71.8	70.8	76.1	78.1	71.1	71.1	66.3
Women 20 years and over	46.5	47.3	44.7	45.0	48.2	55.4	55.8	50.6	48.4	48.3
White					Civilian employment (000)					
Men 20 years and over	1,848	1,869	1,755	1,843	1,927	1,945	1,923	1,812	1,869	1,897
Women 20 years and over	979	1,016	1,040	1,091	1,139	1,174	1,235	1,237	1,258	1,382
Negro & other races										
Men 20 years and over	180	196	180	191	102	220	232	193	162	152
Women 20 years and over	124	132	127	135	144	175	187	172	139	141
					United States					
White					Civilian labor force (000)					
Men 20 years and over	43,961	44,490	45,617	46,179	46,960	47,733	48,583	49,245	49,853	55,133
Women 20 years and over	25,822	26,647	28,609	29,660	30,852	32,233	33,545	34,686	35,851	41,010
Negro & other races										
Men 20 years and over	4,847	5,049	5,238	5,348	5,504	5,731	5,904	5,967	6,091	5,804
Women 20 years and over	3,888	4,067	4,351	4,617	4,833	5,182	5,366	5,557	5,748	5,527
White					Participation rate					
Men 20 years and over	82.6	81.7	80.7	80.3	80.2	80.2	80.2	79.9	79.5	77.4
Women 20 years and over	42.7	43.4	45.3	46.2	47.4	48.7	49.9	50.8	51.6	52.4
Negro & other races										
Men 20 years and over	78.5	78.5	76.4	75.5	75.6	76.4	76.4	74.9	74.2	70.1
Women 20 years and over	51.5	51.3	51.2	52.6	53.3	55.4	55.6	55.8	55.9	53.7

TABLE V-2. ADULT CIVILIAN LABOR FORCE, LABOR FORCE PARTICIPATION RATE, AND CIVILIAN EMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITIAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES, BY RACE AND SEX, ANNUAL AVERAGES OF MONTHLY ESTIMATES FROM THE CURRENT POPULATION SURVEY: 1972-1973 AND 1975-1982 (cont.)

Race, sex, and age	1972	1973	1975	1976	1977	1978	1979	1980	1981	1982[a]
United States (cont.)										
White			Civilian employment (000)							
Men 20 years and over-	42,362	43,183	42,801	43,704	44,784	45,977	46,854	46,671	47,078	50,287
Women 20 years and over	24,555	25,494	26,459	27,634	28,930	30,547	31,876	32,749	33,742	37,615
Negro & other races										
Men 20 years and over	4,518	4,763	4,626	4,782	4,953	5,236	5,409	5,282	5,346	5,804
Women 20 years and over	3,545	3,735	3,851	4,096	4,268	4,632	4,822	4,943	5,031	5,527

SOURCE: Bureau of Labor Statistics, Geographic Profile of Employment and Unemployment, Table 3, published in Washington, D.C., for the following years: 1971, Report 402 (1972); 1972, Report 421 (1973); 1973, Report 431 (1974); 1975, Report 481 (1977); 1976, Report 504 (1977); State Profile of Employment and Unemployment, 1977, Report 539 (Washington, D.C.: 1978), Table 1; Employment and Earnings, vol. 28, no. 1 (Washington, D.C.: January 1982), Tables 3 and 4, and similar documents for previous years; and special release.

a. Labor force measurements include all civilian noninstitutinal population 16 years and over.

TABLE V-3. LEVEL AND RATE OF ADULT UNEMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES, BY RACE AND SEX, ANNUAL AVERAGE OF MONTHLY ESTIMATES FROM THE CURRENT POPULATION SURVEY: 1972-1973 AND 1975-1982

Race, sex, and age	1972	1973	1975	1976	1977	1978	1979	1980	1981	1982[a]
Detroit SMSA										
Total unemployed (000)										
White										
Men 20 years and over	34	25	95	55	40	26	40	92	75	125
Women 20 years and over	26	19	48	44	40	32	36	53	62	89
Negro & other races										
Men 20 years and over	16	15	36	15	16	17	31	58	37	63
Women 20 years and over	11	11	15	16	16	24	26	36	29	45
Unemployment rate										
White										
Men 20 years and over	4.0	3.0	10.7	6.1	4.3	2.8	4.3	10.1	8.3	12.9
Women 20 years and over	6.0	4.4	9.5	8.6	7.5	5.8	6.2	9.0	10.3	12.9
Negro & other races										
Men 20 years and over	10.7	9.5	21.6	10.1	10.0	9.8	16.1	29.0	24.2	36.0
Women 20 years and over	10.3	10.4	13.3	13.6	13.1	16.0	16.4	20.9	21.3	30.8
Michigan										
Total unemployed (000)										
White										
Men 20 years and over	79	58	200	130	98	77	104	222	189	298
Women 20 years and over	60	49	113	113	93	77	85	126	132	207
Negro & other races										
Men 20 years and over	19	21	44	20	21	22	38	64	53	84
Women 20 years and over	16	19	25	25	27	29	34	37	41	82
Unemployment rate										
White										
Men 20 years and over	4.1	3.0	10.2	6.6	4.8	3.8	5.1	10.9	9.2	13.6
Women 20 years and over	5.8	4.6	9.8	9.4	7.5	6.2	6.4	9.3	9.5	13.0
Negro & other races										
Men 20 years and over	9.5	9.7	19.7	9.5	9.3	9.1	14.0	24.9	24.6	35.6
Women 20 years and over	11.4	12.6	16.3	15.8	15.9	14.1	15.3	17.9	22.7	30.5

TABLE V-3. LEVEL AND RATE OF ADULT UNEMPLOYMENT, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN, AND THE UNITED STATES, BY RACE AND SEX, ANNUAL AVERAGE OF MONTHLY ESTIMATES FROM THE CURRENT POPULATION SURVEY: 1972-1973 AND 1975-1982 (cont.)

Race, sex, and age	1972	1973	1975	1976	1977	1978	1979	1980	1981	1982[a]
United States										
Total unemployed (000)										
White										
Men 20 years and over	1,598	1,307	2,816	2,474	2,176	1,756	1,728	2,581	2,776	4,846
Women 20 years and over	1,268	1,153	2,149	2,025	1,922	1,686	1,669	1,931	2,109	3,395
Negro and other races										
Men 20 years and over	330	287	611	566	551	496	495	681	745	1,167
Women 20 years and over	343	332	500	522	564	550	544	616	717	975
Unemployment rate										
White										
Men 20 years and over	3.6	2.9	6.2	5.4	4.6	3.7	3.6	5.2	5.6	8.8
Women 20 years and over	4.9	4.3	7.5	6.8	6.2	5.2	5.0	5.6	5.9	8.3
Negro and other races										
Men 20 years and over	6.8	5.7	11.7	10.6	10.0	8.7	8.4	11.4	12.2	20.1
Women 20 years and over	8.8	8.2	11.5	11.3	11.7	10.6	10.1	11.1	12.5	17.6

SOURCE: Bureau of Labor Statistics, Geographic Profile of Employment and Unemployment, Table 3, published in Washington, D.C., for the following years: Report 402 (1972); 1972, Report 421 (1973) 1973, Report 431 (1974); 1975, Report 481 (1977); 1976, Report 504 (1977); State Profile of Employment and Unemployment, 1977, Report 539 (Washington, D.C.: 1978), Table 1; Employment and Earnings, vol. 28, no. 1 (Washington, D.C.: January 1981 and 1982) Table 3.

a. Labor force is all civilian noninstitutional population 16 and over.

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TABLE V-4. FULL AND PART-TIME STATUS OF THE CIVILIAN LABOR FORCE, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN MICHIGAN AND THE UNITED STATES: 1976-1982

	1976	1977	1978	1979	1980	1981	1982
				Michigan			
				Full-time labor force			
Employed:							
Full-time schedules	2,904	3,061	3,201	3,241	2,984	2,987	2,778
Part-time-econ. reason	157	157	148	148	195	211	273
Unemployed (looking for full-time work):							
Number	296	262	223	280	464	440	556
Pct. full-time force	8.8	7.5	6.2	7.6	12.7	12.1	15.4
TOTAL	3,358	3,479	3,571	3,669	3,643	3,638	3,607
				Part-time labor force			
Employed on voluntary part-time	561	564	564	589	578	576	564
Unemployed (looking for part-time work):							
Number	78	75	67	55	77	88	105
Pct. part-time force	12.2	11.7	10.6	8.6	11.7	13.3	15.7
TOTAL	638	639	631	644	655	664	669
				United States			
				Full-time labor force			
Employed:							
Full-time schedules	71,417	73,987	77,396	79,624	79,029	79,634	79,118
Part-time, econ. reason	3,540	3,530	3,428	3,478	4,205	4,658	6,169
Unemployed (looking for full-time work):							
Number	5,874	5,432	4,706	4,639	6,111	6,631	9,006
Pct. full-time force	7.3	6.5	5.5	5.3	6.8	7.3	9.6
TOTAL	80,831	82,950	85,530	87,741	89,345	90,922	94,293
				Part-time labor force			
Employed on voluntary part-time	12,528	13,028	13,549	13,843	13,997	14,022	14,239
Unemployed (looking for part-time work):							
Number	1,414	1,423	1,341	1,325	1,350	1,449	1,672
Pct. part-time force	10.1	9.8	9.0	8.7	8.8	9.4	10.5
TOTAL	13,942	14,451	14,890	15,167	15,347	15,470	15,912

SOURCE: Bureau of Labor Statistics, *Employment and Earnings* (Washington, D.C.: monthly; and Michigan Employment Security Commission, special release. special release.

TABLE V-5. EMPLOYMENT STATUS, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN AND THE UNITED STATES, BY OCCUPATION GROUP: 1980-1982

Occupation group	1980			1981			1982		
		Unemployed			Unemployed			Unemployed	
	Employed (000)	Number (000)	Rate (percent)	Employed (000)	Number (000)	Rate (percent)	Employed (000)	Number (000)	Rate (percent)
Detroit SMSA									
Professional and technical	309	11	3.6	311	11	3.4	336	15	4.3
Managers and administrators, except farm	170	7	.9	187	8	4.3	168	9	5.3
Sales workers	118	9	7.0	135	9	6.3	123	10	7.2
Clerical workers	367	33	8.3	326	37	10.2	321	48	12.9
TOTAL white-collar	964	60	5.9	960	66	6.4	948	82	7.9
Craft worker	233	30	11.3	217	27	11.1	185	37	16.5
Operatives, exc. transport	191	84	30.4	179	62	25.7	171	71	29.3
Transport equip. operatives	67	12	5.7	58	11	15.5	52	15	22.6
Nonfarm laborers	73	25	25.7	78	24	23.3	76	28	26.8
TOTAL blue-collar	564	151	21.1	531	123	18.8	484	150	23.7
Service workers	252	36	12.4	257	34	11.6	239	43	15.4
Farm workers	21	0	22.5	6	0	-	-	-	-
TOTAL	1,782	247	12.2	1,754	223	11.3	1,679	276	14.1

TABLE V-5. EMPLOYMENT STATUS, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN AND THE UNITED STATES, BY OCCUPATION GROUP: 1980-1982 (cont.)

Occupation group	1980 Employed (000)	1980 Unemployed Number (000)	1980 Unemployed Rate (percent)	1981 Employed (000)	1981 Unemployed Number (000)	1981 Unemployed Rate (percent)	1982 Employed (000)	1982 Unemployed Number (000)	1982 Unemployed Rate (percent)
Michigan									
Professional and technical	587	18	3.0	591	21	3.4	635	27	4.1
Managers and administrators, except farm	354	13	3.5	394	21	4.9	355	20	5.3
Sales workers	225	17	7.0	252	16	6.1	233	20	8.0
Clerical workers	696	58	7.7	651	61	8.6	616	81	11.6
TOTAL white-collar	1,861	106	5.4	1,888	119	5.9	1,840	148	7.4
Craft workers	497	70	12.3	472	56	10.7	422	84	16.6
Operatives, exc. transport	483	165	25.5	473	126	21.0	435	154	26.2
Transport equip. operatives	144	27	15.8	129	22	14.8	129	29	18.2
Nonfarm laborers	173	50	22.4	182	53	22.6	170	58	25.5
TOTAL blue-collar	1,297	312	19.4	1,257	258	17.0	1,156	325	22.0
Service workers	550	71	11.4	570	76	11.8	561	95	14.5
Farm workers	48	5	9.4	58	4	6.4	59	7	10.4
TOTAL	3,757	494	15.2	3,773	457	10.8	3,615	575	13.7

TABLE V-5. EMPLOYMENT STATUS, DATA BASED ON A SAMPLE OF HOUSEHOLDS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, IN MICHIGAN AND THE UNITED STATES, BY OCCUPATION GROUP: 1980-1982 (cont.)

	1980			1981			1982		
		Unemployed			Unemployed			Unemployed	
Occupation group	Employed (000)	Number (000)	Rate (percent)	Employed (000)	Number (000)	Rate (percent)	Employed (000)	Number (000)	Rate (percent)
				United States					
Professional and technical	15,594	396	2.5	16,420	469	2.8	16,951	579	3.3
Managers and administrators, except farm	10,895	273	2.7	11,540	317	2.7	11,493	417	3.5
Sales workers	6,177	281	4.4	6,425	308	4.6	6,580	388	5.6
Clerical workers	18,069	1,005	5.3	18,564	1,129	5.7	18,446	1,384	7.0
TOTAL white-collar	50,735	1,955	3.3	52,941	2,223	4.0	53,470	2,767	4.9
Craft workers	12,548	887	6.6	12,662	1,022	7.5	12,272	1,397	10.2
Operatives, exc. transport	10,358	1,442	12.2	10,540	1,465	12.2	9,429	2,033	17.7
Transport equip. operatives	3,479	328	8.6	3,476	330	8.7	3,377	490	11.7
Nonfarm labors	4,443	757	14.6	4,583	792	14.7	4,518	1,025	18.5
TOTAL blue-collar	30,828	3,414	10.0	31,261	3,608	10.3	29,597	4,904	14.2
Service workers	12,953	1,111	7.9	13,438	1,307	8.9	13,736	1,626	10.6
Farm workers	2,715	125	4.4	2,749	153	5.3	2,723	191	6.5
TOTAL	97,231	6,605	6.4	100,397	8,273	7.6	99,526	9,488	8.7

SOURCE: Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C.: monthly); and Geographic Profile of Employment and Unemployment, 1982, (Washington, D.C.: 1983); Tables 14 and 24; and Michigan Employment Security Commission, special release.

TABLE V-6. SUMMARY OCCUPATION DISTRIBUTION IN MICHIGAN BY RACE AND SEX: CENSUS 1980

	Total		Spanish		White		Black	
	Male	Female	Male	Female	Male	Female	Male	Female
White Collar								
Managerial & Professional Specialities:								
Executive, adminis- tr. & managerial mgrs. in pub. adminis.	7,907	4,348	45	36	6,974	3,598	798	711
Other mgr., admins.	182,758	67,521	1,259	608	173,368	61,469	7,484	5,290
Accountants	24,559	13,347	200	103	23,100	11,478	1,109	1,629
Personnel, training & labor rel. spec.	10,837	7,293	95	119	9,557	5,702	1,173	1,459
Other mgt.-related	24,924	12,383	168	54	23,339	11,207	1,418	1,094
Professional specialty:								
Engineers & related	66,169	2,950	526	43	61,848	2,511	1,959	347
Math. & Comp. scientist	9,093	2,919	72	35	8,346	2,603	416	262
Natural scientists	7,115	1,946	63	24	6,437	1,688	298	143
Doctors, dentitsts, etc.	22,705	2,913	445	68	19,760	2,009	800	258
Nurses, dieticns., etc.	9,759	55,946	127	559	8,891	49,694	648	4,254
Teachers,post-second	15,701	8,494	239	173	14,459	7,677	553	560
Teachers, elementary, secondry, pre-school	46,781	97,071	262	730	43,426	85,857	2,949	10,329
Lawyers, judges	15,159	2,254	88	13	14,508	1,999	594	250
Writers, artists, entertainers, athletes	28,625	17,074	221	186	26,602	15,843	1,665	1,003
Other professionals	27,583	29,681	332	406	24,388	23,668	2,874	5,481
Technicians:								
Health fields	6,475	37,134	104	361	5,451	31,216	745	5,228
Engineering, drafting	34,199	4,516	327	68	32,167	3,897	1,556	502
Science	4,825	2,130	30	47	4,297	1,794	356	220
Computer programmers	7,013	3,151	70	36	6,539	2,776	350	289
Misc. technicians	10,486	5,563	175	99	9,690	4,979	386	447

TABLE V-6. SUMMARY OCCUPATION DISTRIBUTION IN MICHIGAN BY RACE AND SEX: CENSUS 1980 (cont.)

	Total		Spanish		White		Black	
	Male	Female	Male	Female	Male	Female	Male	Female
				White Collar (cont.)				
Sales:								
Supervsrs. & propr.	39,875	15,536	377	149	37,928	14,647	1,539	728
Bus. goods & serv.	40,115	20,678	217	175	38,100	19,417	1,734	1,122
Sales representatives	41,174	6,114	144	47	39,943	5,726	1,012	350
Retail sales workers	51,224	78,383	488	865	48,124	72,353	2,686	5,273
Cashiers	10,648	68,685	217	994	9,330	60,648	1,163	7,200
Other sales	5,277	9,332	30	89	4,963	8,864	265	380
Administrative Support:								
Supervisors	22,269	19,211	148	147	20,374	16,565	1,723	2,507
Secretaries, stenographers, typists	2,384	184,553	96	2,126	2,012	166,546	338	16,178
Information clerks	4,610	33,868	26	432	3,780	29,560	761	3,933
Non-fin. recrd. proc.	9,767	30,609	224	459	8,307	25,274	1,283	4,865
Financial record proc.	8,709	72,373	89	673	7,942	67,064	626	4,686
Mail & Messg. distrib.	16,391	12,110	218	124	13,438	8,546	2,786	3,445
Material recording, schdl., distrib.	47,489	22,114	727	256	42,279	18,970	4,521	2,875
Adjusters, investig.	7,115	11,622	73	128	6,271	9,532	772	1,965
General office clerk	9,458	49,373	119	781	7,923	41,500	1,357	7,144
Other adminis. support	17,434	81,464	202	1,003	15,158	67,696	1,991	12,584
TOTAL WHITE COLLAR	896,613	1,094,659	8,243	12,216	829,019	964,573	52,688	114,991
				Service Occupations				
Private household	835	18,257	0	261	596	13,855	226	4,119
Protective service	51,658	7,828	690	89	43,312	5,896	7,617	1,806
Food prep. & service	65,722	153,000	1,338	2,150	56,858	138,399	6,945	11,742
Health service	9,175	74,896	199	1,157	6,458	57,378	2,457	16,003
Cleaning & building	87,935	45,666	1,829	1,104	70,540	33,685	15,718	10,964
Child care workers	1,924	25,948	32	580	1,345	20,682	527	4,795
Other personal service	11,503	27,663	193	321	9,728	24,333	1,579	2,875
TOTAL SERVICE	228,752	353,258	4,281	5,662	188,837	294,228	35,069	52,304

TABLE V-6. SUMMARY OCCUPATION DISTRIBUTION IN MICHIGAN BY RACE AND SEX: CENSUS 1980 (cont.)

	Total		Spanish		White		Black	
	Male	Female	Male	Female	Male	Female	Male	Female
Blue Collar Occupations								
Precision production, craft & repair occupations:								
Mechanics & Repairers								
Vehicle & motor equip.	68,675	1,012	854	0	62,719	804	5,095	200
Industrial machinery	28,014	583	402	4	25,791	486	1,909	89
Electrical & electronic machinery	20,269	1,619	237	74	18,863	1,304	1,239	254
Other mech. & rep.	52,380	1,595	890	29	47,865	1,291	3,737	272
Construction trades & extractive occup.	165,453	3,226	1,843	24	154,534	2,807	8,984	374
Precision production								
production supervisors	81,790	8,228	868	102	75,499	6,996	5,671	1,116
Tool & die makers	34,967	491	308	0	33,341	414	1,314	66
Oth.precis.metal wkr.	34,893	1,781	410	12	33,195	1,509	1,239	266
Other precision prod.	38,077	13,657	517	203	34,304	11,805	3,161	1,578
Machine operators, assemblers & inspectors:								
Machine oper. & tender	232,091	89,677	5,206	2,237	196,543	72,212	31,223	15,410
Assemblers	101,063	55,862	3,208	1,322	72,644	41,736	26,020	12,798
Welders, cutter, etc.	45,903	5,610	1,103	62	37,075	3,938	7,951	1,566
Prod. inspec., testers	38,429	19,733	743	499	31,565	15,723	6,155	3,551
Transportation & material moving:								
Motor vehicle oper.	110,639	16,577	1,317	142	97,348	14,866	12,047	1,566
Rail, water transp.	8,496	133	127	0	7,991	111	360	22
Material mov. equip.	59,054	2,898	1,094	82	49,856	2,322	8,111	541
Laborers	146,449	36,990	3,342	846	124,756	31,551	18,532	4,789
TOTAL BLUE COLLAR	1,266,642	259,672	22,469	5,638	1,103,889	209,875	142,748	44,458

TABLE V-6. SUMMARY OCCUPATION DISTRIBUTION IN MICHIGAN BY RACE AND SEX: CENSUS 1980 (cont.)

	Total		Spanish		White		Black	
	Male	Female	Male	Female	Male	Female	Male	Female
Farm, forestry, fishing	59,231	12,048	1,017	380	56,355	11,454	1,780	303
Total experienced CLF	2,451,238	1,719,637	36,010	23,896	2,178,100	1,480,130	232,285	212,056
Unemployed, no work experience since 1975	16,650	24,472	456	730	9,836	15,567	6,360	8,077
Total civilian labor force	2,467,888	1,744,109	36,466	24,626	2,187,936	1,495,697	238,645	220,133

SOURCE: U.S. Bureau of the Census, computer tape.

TABLE V-7. UNEMPLOYED PERSONS, BY DURATION OF UNEMPLOYMENT, DATA BASED ON A HOUSEHOLD SAMPLE IN MICHIGAN AND THE UNITED STATES: 1979-1982

	Michigan				United States			
	1979	1980	1981	1982	1979	1980	1981	1982
Thousands of persons	335	541	528	661	5,963	7,461	8,273	10,678
Percentage distribution by duration of unemployment:								
Less than 15 weeks	76.4	64.7	60.5	58.6	79.8	75.4	72.4	67.4
15-26 weeks	13.5	16.5	13.5	16.1	11.5	13.8	13.6	16.0
27-51 weeks	4.5	11.6	11.5	25.3[a]	4.5	6.5	7.3	16.6[a]
52 weeks or longer	5.7	7.2	14.5		4.2	4.3	6.8	
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, Employment and Earnings (Washington, D.C.: monthly), Table 17.

[a] Percent unemployed 27 weeks and over.

TABLE V-8. UNEMPLOYED PERSONS, BY REASON FOR UNEMPLOYMENT, DATA BASED ON A HOUSEHOLD SAMPLE IN MICHIGAN AND THE UNITED STATES: 1979-1982

(In thousands)

	Michigan				United States			
	1979	1980	1981	1982	1979	1980	1981	1982
Job losers:								
On lay off	91	218	156	131	835	1,476	1,430	2,127
Others	72	119	137	264	1,720	2,381	2,837	4,141
TOTAL	163	337	293	395	2,555	3,857	4,267	6,268
Job leavers	44	37	33	32	854	863	923	840
Reentrant	93	120	132	148	1,758	1,886	2,102	2,384
New entrants	35	47	71	86	797	855	981	1,185
TOTAL UNEMPLOYED	335	541	528	661	5,963	7,461	8,273	10,678

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, Employment and Earnings (Washington, D.C.: monthly), Table 13.

TABLE V-9. MICHIGAN AND U.S. CIVILIAN LABOR FORCE, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1973-1983

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1973	3,715	3,753	3,734	3,718	3,776	3,855	3,883	3,851	3,774	3,798	3,858	3,919
1974	3,867	3,872	3,847	3,828	3,831	3,879	3,950	3,933	3,855	3,920	3,913	3,856
1975	3,901	3,904	3,933	3,879	3,834	3,915	3,893	3,913	3,858	3,852	3,928	3,881
1976	3,857	3,955	3,954	3,939	3,959	4,009	4,036	4,079	4,012	4,012	4,041	4,010
1977	4,016	4,085	4,092	4,056	4,038	4,166	4,140	4,157	4,121	4,170	4,179	4,134
1978	4,164	4,162	4,128	4,158	4,159	4,243	4,230	4,203	4,187	4,185	4,232	4,275
1979	4,248	4,279	4,281	4,244	4,318	4,374	4,394	4,308	4,315	4,324	4,348	4,317
1980	4,256	4,275	4,224	4,219	4,306	4,393	4,350	4,340	4,287	4,924	4,281	4,260
1981	4,214	4,200	4,214	4,282	4,345	4,412	4,413	4,391	4,301	4,346	4,315	4,279
1982	4,218	4,229	4,238	4,203	4,306	4,319	4,385	4,358	4,286	4,257	4,240	4,305
1983	4,269	4,248	4,238	4,301	4,391	4,435	4,419	4,386	4,310	4,245	4,180	4,216
					United States							
1973	86,327	87,303	87,961	88,127	88,238	91,124	91,655	90,888	89,782	90,547	90,690	90,520
1974	89,924	90,273	90,486	90,366	90,830	93,481	94,238	93,446	92,449	92,909	92,638	92,368
1975	92,200	91,972	92,464	92,459	92,888	95,174	96,053	95,525	94,023	94,510	94,041	93,995
1976	93,938	94,075	94,400	94,782	94,925	97,499	98,605	98,133	96,430	96,999	97,116	97,004
1977	96,197	96,837	97,277	97,352	97,755	100,743	100,960	100,744	99,367	100,144	100,522	100,213
1978	99,664	99,641	100,166	100,610	101,092	104,100	104,512	103,946	102,748	103,474	103,586	103,565
1979	102,802	103,185	103,606	103,198	103,476	106,210	107,096	106,489	105,510	106,084	105,871	106,040
1980	105,344	105,412	105,510	105,592	106,233	108,311	109,268	108,404	106,989	107,673	107,532	107,009
1981	106,885	107,015	107,634	107,906	108,586	109,904	110,742	110,099	108,273	109,244	109,179	108,574
1982	108,014	108,324	108,761	108,814	109,914	111,569	112,526	111,887	110,546	110,767	110,855	110,477
1983	109,779	109,647	109,873	109,875	110,308	113,383	113,980	113,578	112,197	112,042	112,147	111,795

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Figures represent the sum of civilian employment and unemployment and are not seasonally adjusted.

TABLE V-10. MICHIGAN AND U.S. CIVILIAN EMPLOYMENT, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1973-1983

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1973	3,451	3,460	3,482	3,512	3,580	3,635	3,642	3,647	3,610	3,619	3,658	3,686
1974	3,644	3,589	3,523	3,551	3,576	3,606	3,653	3,656	3,581	3,663	3,578	3,475
1975	3,366	3,336	3,346	3,349	3,362	3,358	3,383	3,455	3,429	3,465	3,545	3,462
1976	3,462	3,532	3,533	3,546	3,591	3,611	3,650	3,699	3,677	3,711	3,703	3,676
1977	3,659	3,686	3,694	3,759	3,742	3,815	3,775	3,774	3,814	3,899	3,856	3,844
1978	3,825	3,864	3,832	3,884	3,886	3,944	3,923	3,866	3,944	3,955	3,953	3,987
1979	3,908	3,928	3,940	3,879	4,008	4,058	4,056	3,984	4,006	4,011	4,005	3,949
1980	3,817	3,794	3,757	3,694	3,698	3,772	3,732	3,792	3,772	3,768	3,744	3,741
1981	3,627	3,593	3,653	3,752	3,842	3,916	3,874	3,899	3,836	3,840	3,798	3,647
1982	3,542	3,547	3,516	3,551	3,692	3,702	3,740	3,724	3,664	3,624	3,545	3,562
1983	3,543	3,547	3,517	3,633	3,748	3,785	3,842	3,798	3,782	3,715	3,690	3,714
						United States						
1973	81,598	82,405	83,397	83,900	84,383	86,217	87,042	86,616	85,552	86,716	86,562	86,390
1974	84,843	85,061	85,659	85,994	86,611	88,022	88,897	88,479	87,162	87,779	86,863	86,169
1975	83,928	83,573	84,018	84,551	85,173	86,507	87,742	87,726	86,399	87,160	86,700	86,689
1976	85,652	85,932	86,769	87,786	88,510	89,727	90,908	90,690	89,281	90,041	89,892	89,850
1977	88,217	88,601	89,597	90,660	91,475	93,154	93,879	93,846	92,788	93,779	94,027	94,183
1978	92,616	92,755	93,545	94,783	95,486	97,530	97,917	97,855	96,790	97,851	97,788	97,669
1979	96,201	96,536	97,282	97,478	98,057	99,800	100,814	100,174	99.533	100,120	99,907	100,013
1980	98,111	98,235	98,527	98,569	98,732	99,830	100,665	100,202	99,334	99,999	99,850	99,579
1981	98,139	98,401	99,364	100,345	100,855	101,419	102,612	102,152	100,389	101,028	100,502	99,562
1982	97,831	97,946	98,471	98,858	99,957	100,683	101,490	101,177	99,851	99,825	99,379	98,849
1983	97,262	97,265	97,994	98,840	99,543	101,813	103,273	103,167	102,366	102,659	103,018	102,803

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Employed persons comprise two groups. The first includes all those who were 16 years old or older and, during the survey week, did any work at all as paid employees, or in their own business or profession, or on their own farm, or who worked 15 hours or more as unpaid workers in a family-operated enterprise. The second includes all those who did not work but had jobs or businesses from which they were temporarily absent due to illness, bad weather, vacation, labor-management dispute, or various personal reasons--whether or not they were paid by their employers for the time off and whether or not they were seeking other jobs. Data are not seasonally adjusted.

TABLE V-11. SEASONALLY ADJUSTED MICHIGAN AND U.S. CIVILIAN EMPLOYMENT, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1974-1984

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Michigan												
1974	3,696	3,634	3,571	3,594	3,582	3,590	3,626	3,597	3,576	3,617	3,531	3,481
1975	3,419	3,376	3,394	3,390	3,374	3,344	3,360	3,395	3,417	3,418	3,502	3,467
1976	3,516	3,571	3,581	3,585	3,605	3,595	3,631	3,637	3,661	3,665	3,664	3,679
1977	3,714	3,723	3,743	3,800	3,759	3,793	3,758	3,710	3,792	3,851	3,822	3,841
1978	3,886	3,907	3,889	3,930	3,902	3,910	3,904	3,798	3,917	3,904	3,919	3,979
1979	3,980	3,983	4,012	3,930	4,013	4,009	4,023	3,918	3,969	3,960	3,976	3,948
1980	3,901	3,865	3,848	3,753	3,692	3,713	3,681	3,715	3,729	3,722	3,721	3,749
1981	3,725	3,682	3,765	3,822	3,824	3,851	3,806	3,816	3,784	3,800	3,781	3,659
1982	3,644	3,643	3,537	3,615	3,655	3,621	3,645	3,628	3,604	3,589	3,541	3,588
1983	3,649	3,650	3,647	3,695	3,700	3,698	3,733	3,698	3,719	3,687	3,696	3,748
1984	3,722	3,815	3,981									
United States												
1974	86,555	86,754	86,819	86,669	86,891	86,941	87,149	87,037	87,051	86,995	86,626	86,144
1975	85,627	85,256	85,187	85,189	85,451	85,355	85,894	86,234	86,279	86,370	86,456	86,665
1976	87,400	87,672	87,985	88,416	88,794	88,563	89,093	89,223	89,173	89,274	89,634	89,803
1977	89,928	90,342	90,808	91,271	91,754	91,959	92,084	92,441	92,702	93,052	93,761	94,105
1978	94,384	94,519	94,755	95,394	95,769	96,343	96,090	96,431	96,670	97,133	97,485	97,581
1979	97,948	98,329	98,480	98,103	98,331	98,679	99,006	98,776	99,340	99,404	99,574	99,933
1980	99,860	100,007	99,728	99,234	98,987	98,762	98,799	98,792	99,052	99,300	99,525	99,590
1981	99,951	100,217	100,609	100,074	101,096	100,379	100,705	100,638	100,013	100324	100,155	99,585
1982	99,682	99,810	99,754	99,598	100,179	99,653	99,503	99,563	99,412	99,146	99,036	98,979
1983	99,154	99,172	99,316	99,606	99,762	100,743	101,225	101,484	101,876	101,970	102,606	102,941
1984	103,190	103,892	104,140									

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Unemployed persons include those 16 year old or older who did not work at all during the survey week, were looking for work, and were available for work during the reference period, except for temporary illness. This includes those who were available for work and waiting to be recalled from layoff or were waiting to report to a new wage or salary job scheduled to start within the following 30 days.

TABLE V-12. MICHIGAN AND U.S. CIVILIAN UNEMPLOYMENT, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1973-1983

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1973	264	293	253	206	195	220	240	204	164	179	199	233
1974	223	283	324	277	255	273	296	277	274	258	334	381
1975	535	568	587	529	471	557	510	458	429	387	383	420
1976	396	423	420	394	368	398	386	380	335	302	338	335
1977	357	400	398	296	297	352	366	383	308	270	323	291
1978	339	299	296	274	273	299	308	337	243	229	280	288
1979	341	351	340	365	311	316	338	324	309	313	343	367
1980	439	481	468	525	607	621	618	549	515	526	536	520
1981	583	600	553	521	493	486	527	483	460	504	517	614
1982	676	682	722	652	614	618	645	634	621	634	695	743
1983	726	701	722	668	643	650	577	588	529	530	489	501
						United States						
1973	4,730	4,898	4,564	4,227	3,855	4,907	4,613	4,273	4,230	3,830	4,127	4,130
1974	5,081	5,212	4,826	4,372	4,219	5,459	5,341	4,967	5,287	5,131	5,775	6,199
1975	8,272	8,399	8,446	7,908	7,715	8,667	8,311	7,799	7,624	7,350	7,341	7,307
1976	8,286	8,143	7,631	6,996	6,415	7,772	7,697	7,443	7,148	6,958	7,224	7,154
1977	7,980	8,237	7,680	6,692	6,280	7,589	7,081	6,897	6,579	6,365	6,495	6,031
1978	7,048	6,886	6,621	5,826	5,605	6,481	6,597	6,090	5,958	5,624	5,797	5,896
1979	6,602	6,649	6,325	5,720	5,419	6,409	6,282	6,315	5,978	5,964	5,964	6,027
1980	7,234	7,177	6,983	7,023	7,501	8,481	8,603	8,202	7,655	7,674	7,682	7,430
1981	8,746	8,614	8,271	7,561	7,731	8,485	8,130	7,947	7,884	8,216	8,676	9,013
1982	10,183	10,373	10,290	9,957	9,957	10,886	11,036	10,710	10,695	10,942	11,476	11,628
1983	12,517	12,382	11,879	11,035	10,765	11,570	10,707	10,411	9,830	9,382	9,129	8,992

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Unemployed persons include those 16 years old or older who did not work at all during the survey week, were looking for work, and were available for work during the reference period, except for temporary illness. This includes those who were available for work and waiting to be recalled from layoff or were waiting to report to a new wage or salary job scheduled to start within the following 30 days.

TABLE V-13. SEASONALLY ADJUSTED MICHIGAN AND U.S. UNEMPLOYMENT RATES, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1974-1984

Year	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1974	5.4	6.2	7.1	6.8	6.9	6.6	7.0	7.5	8.0	8.1	9.5	10.0
1975	13.3	13.4	13.6	13.2	12.5	13.8	12.7	12.2	12.0	11.7	10.6	11.0
1976	9.8	9.5	9.3	9.6	9.6	9.5	9.2	9.7	9.2	9.0	9.1	8.6
1977	8.4	8.7	8.6	6.9	7.6	8.1	8.4	9.6	8.4	7.9	8.3	7.4
1978	7.5	6.1	6.2	6.2	6.8	6.8	6.8	8.4	6.8	6.8	7.1	7.1
1979	7.2	7.2	7.1	8.2	7.4	7.1	7.2	8.0	8.2	8.4	8.5	8.8
1980	9.3	10.1	10.1	12.0	14.3	14.3	13.9	13.3	13.2	13.4	13.2	12.4
1981	12.7	13.1	12.0	11.7	11.6	11.2	11.9	11.7	12.0	12.6	12.6	14.4
1982	14.8	14.8	15.7	15.0	14.6	14.6	14.9	15.3	15.8	15.8	17.0	17.1
1983	15.7	15.2	15.7	15.1	15.1	15.0	13.3	14.1	13.6	13.3	12.3	11.6
1984	11.5	11.4	11.3									
						United States						
1974	5.1	5.2	5.1	5.1	5.1	5.4	5.5	5.5	5.9	6.0	6.6	7.2
1975	8.1	8.1	8.6	8.8	9.0	8.8	8.6	8.4	8.4	8.4	8.3	8.2
1976	7.9	7.7	7.6	7.7	7.4	7.6	7.8	7.8	7.6	7.7	7.8	7.8
1977	7.5	7.6	7.4	7.2	7.0	7.2	6.9	7.0	6.8	6.8	6.8	6.4
1978	6.4	6.3	6.3	6.1	6.0	5.9	6.2	5.9	6.0	5.8	5.9	6.0
1979	5.9	5.9	5.8	5.8	5.6	5.7	5.7	6.0	5.9	6.0	5.9	6.0
1980	6.3	6.3	6.3	6.9	7.4	7.6	7.8	7.7	7.5	7.5	7.5	7.2
1981	7.5	7.4	7.4	7.2	7.4	7.4	7.3	7.4	7.6	7.9	8.3	8.5
1982	8.6	8.9	9.0	9.4	9.4	9.5	9.9	9.9	10.2	10.4	10.7	10.7
1983	10.4	10.4	10.3	10.2	10.1	10.0	9.5	9.5	9.2	8.8	8.4	8.2
1984	8.0	7.8	7.8									

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Figures show unemployment as a percentage of civilian labor force and are not seasonally adjusted.

TABLE V-14. MICHIGAN AND U.S. UNEMPLOYMENT RATES, DATA BASED ON A HOUSEHOLD SAMPLE, BY MONTH: 1973-1983

Year	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1973	7.1	7.8	6.8	5.5	5.2	5.7	6.2	5.3	4.3	4.7	5.2	5.9
1974	5.8	7.3	8.4	7.2	6.7	7.0	7.5	7.0	7.1	6.6	8.5	9.9
1975	13.7	14.5	14.9	13.6	12.3	14.2	13.1	11.7	11.1	10.0	9.8	10.8
1976	10.3	10.7	10.6	10.0	9.3	9.9	9.6	9.3	8.4	7.5	8.4	8.3
1977	8.9	9.8	9.7	7.3	7.4	8.4	8.8	9.2	7.5	6.5	7.7	7.0
1978	8.1	7.2	7.2	6.6	6.6	7.0	7.3	8.0	5.8	5.5	6.6	6.7
1979	8.0	8.2	8.0	8.6	7.2	7.2	7.7	7.5	7.2	7.2	7.9	8.5
1980	10.3	11.3	11.1	12.4	14.1	14.1	14.2	12.6	12.0	12.3	12.5	12.2
1981	13.8	14.3	13.1	12.2	11.4	11.1	12.0	11.0	10.7	11.6	12.0	14.4
1982	16.0	16.1	17.0	15.5	14.3	14.3	14.7	14.5	14.5	14.9	16.4	17.3
1983	17.0	16.5	17.0	15.5	14.7	14.6	13.1	13.4	12.3	12.5	11.7	11.9
						United States						
1973	5.5	5.6	5.2	4.8	4.4	5.4	5.0	4.7	4.7	4.2	4.6	4.6
1974	5.7	5.8	5.3	4.8	4.6	5.8	5.7	5.3	5.7	5.5	6.2	6.7
1975	9.0	9.1	9.1	8.6	8.3	9.1	8.7	8.2	8.1	7.8	7.8	7.8
1976	8.8	8.7	8.1	7.4	6.8	8.0	7.8	7.6	7.4	7.2	7.4	7.4
1977	8.3	8.5	7.9	6.9	6.4	7.5	7.0	6.8	6.6	6.4	6.5	6.0
1978	7.1	6.9	6.6	5.8	5.5	6.2	6.3	5.9	5.8	5.4	5.6	5.7
1979	6.4	6.4	6.1	5.5	5.2	6.0	5.9	5.9	5.7	5.6	5.6	5.7
1980	6.9	6.8	6.6	6.7	7.1	7.8	7.9	7.6	7.2	7.1	7.1	6.9
1981	8.2	8.0	7.7	7.0	7.1	7.7	7.3	7.2	7.3	7.5	7.9	8.3
1982	9.4	9.6	9.5	9.2	9.1	9.8	9.8	9.6	9.7	9.9	10.4	10.5
1983	11.4	11.3	10.8	10.0	9.8	10.2	9.4	9.2	8.8	8.4	8.1	8.3

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

NOTE: Figures show unemployment as a percentage of civilian labor force and are not seasonally adjusted.

TABLE V-15. MICHIGAN AND U.S. NONAGRICULTURAL WAGE AND SALARY JOBS, DATA BASED ON AN EMPLOYER SURVEY, BY MONTH: 1974-1983

(In thousands)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1974	3,258	3,214	3,217	3,243	3,282	3,324	3,295	3,310	3,345	3,327	3,306	3,211
1975	3,082	3,034	3,047	3,074	3,126	3,145	3,118	3,146	3,191	3,219	3,226	3,136
1976	3,163	3,178	3,200	3,252	3,285	3,315	3,266	3,298	3,338	3,344	3,376	3,383
1977	3,287	3,302	3,333	3,367	3,431	3,470	3,455	3,455	3,519	3,549	3,562	3,579
1978	3,463	3,487	3,522	3,577	3,622	3,646	3,603	3,593	3,671	3,694	3,702	3,712
1979	3,600	3,605	3,625	3,630	3,692	3,701	3,648	3,588	3,645	3,650	3,627	3,635
1980	3,501	3,499	3,491	3,440	3,425	3,420	3,355	3,357	3,403	3,471	3,481	3,470
1981	3,363	3,352	3,375	3,380	3,405	3,418	3,342	3,317	3,370	3,393	3,352	3,306
1982	3,204	3,197	3,204	3,189	3,235	3,224	3,188	3,170	3,191	3,186	3,169	3,162
1983	3,098	3,114	3,130	3,145	3,182	3,190	3,182	3,162	3,241	3,255	3,263	3,274
						United States						
1974	76,922	77,039	77,362	77,911	78,513	79,210	78,311	78,459	78,959	79,258	78,937	78,295
1975	76,066	75,641	75,686	76,018	76,649	77,143	76,466	76,993	77,602	78,158	78,312	78,600
1976	77,252	77,482	78,092	78,919	79,414	80,043	79,272	79,537	80,244	80,479	80,839	81,016
1977	79,427	79,636	80,493	81,418	82,252	83,210	82,551	82,845	83,798	84,298	84,744	84,980
1978	83,318	83,614	84,607	85,910	86,715	87,701	86,872	87,174	87,801	88,417	88,945	89,272
1979	87,514	87,751	88,654	89,193	90,012	90,857	89,869	89,969	90,521	91,000	91,204	91,335
1980	89,553	89,691	90,253	90,603	90,623	90,778	89,436	89,723	90,390	90,985	91,329	91,513
1981	89,688	89,833	90,371	91,027	91,514	92,158	91,237	91,238	91,739	91,913	91,745	91,414
1982	89,184	89,273	89,566	89,938	90,407	90,585	89,221	89,088	89,562	89,541	89,466	89,321
1983	87,600	87,744	88,172	89,016	89,830	90,654	89,946	89,599	91,213	91,725	92,061	92,247

SOURCE: Michigan Department of Labor, Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C. monthly). Table B2.

NOTE: These figures represent the number of jobs reported by employers. A single person who holds more than one job may be counted more than once in this survey. Excluded are unpaid family workers, domestic servants in private homes, proprietors and other self-employed persons, and farm workers.

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Alcona, Iosco						
1977	12,250	1,500	12.2	2,475	1,250	3,475
1978	12,600	1,525	12.1	2,375	1,400	3,750
1979	13,100	1,550	11.8	2,625	1,450	3,650
1980	13,075	2,000	15.3	2,825	1,100	3,700
1981	13,175	1,925	14.6	2,650	1,125	3,750
1982	13,300	2,125	16.0	2,900	1,050	3,400
1983	13,500	2,350	17.4	2,650	1,025	3,600
Alger						
1977	3,725	525	14.1	575	900	850
1978	3,400	425	12.5	550	850	825
1979	3,650	450	12.3	575	900	850
1980	3,675	525	14.3	675	875	800
1981	3,700	600	16.2	550	750	850
1982	3,750	675	18.0	550	750	850
1983	3,825	600	15.7	575	800	850
Allegan						
1977	32,000	2,175	6.8	3,625	7,000	6,250
1978	33,075	1,925	5.8	3,600	7,425	6,800
1979	33,625	2,250	6.7	3,900	7,575	6,650
1980	34,225	3,825	11.2	3,875	7,000	6,850
1981	35,025	3,900	11.1	3,500	7,275	6,800
1982	37,225	5,525	14.8	3,375	7,375	6,675
1983	37,950	5,450	14.4	3,375	7,625	6,850
Alpena						
1977	15,300	2,125	14.9	2,425	2,700	5,350
1978	15,600	1,950	12.5	2,425	2,850	5,600
1979	15,600	1,725	11.1	2,425	2,900	5,550
1980	15,800	2,200	13.9	2,475	2,725	5,700
1981	15,650	2,250	14.4	2,425	2,700	5,425
1982	15,450	3,225	20.9	2,375	2,150	4,775
1983	15,375	2,800	18.2	2,500	2,100	5,075
Antrim						
1977	6,700	700	10.4	900	1,300	1,400
1978	6,925	625	9.0	925	1,375	1,550
1979	7,600	775	10.2	1,100	1,400	1,700
1980	7,525	1,175	15.6	1,175	1,200	1,650
1981	7,450	1,325	17.8	1,100	1,050	1,625
1982	7,375	1,550	21.0	1,075	975	1,425
1983	7,175	1,325	18.5	1,050	950	1,475

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Arenac						
1977	7,500	825	11.0	875	975	1,500
1978	6,675	725	10.9	750	800	1,425
1979	6,400	550	8.6	775	725	1,450
1980	6,175	875	14.2	775	375	1,550
1981	6,200	700	11.3	725	375	1,650
1982	6,575	850	12.9	675	325	1,650
1983	7,075	1,025	14.5	675	375	1,825
Baraga						
1977	3,025	400	13.2	700	775	725
1978	3,250	350	10.8	775	850	900
1979	3,300	375	11.4	750	750	975
1980	3,300	450	13.6	775	675	975
1981	3,125	475	15.2	725	625	875
1982	3,275	725	22.1	700	525	925
1983	3,250	700	21.5	675	475	925
Barry, Calhoun						
1977	80,900	6,700	8.3	12,500	23,800	29,300
1978	80,700	5,400	6.7	12,100	24,300	30,600
1979	80,100	5,600	7.0	12,200	23,800	30,300
1980	80,300	9,200	11.5	12,500	20,900	30,500
1981	79,700	9,100	11.4	12,100	19,600	30,400
1982	80,700	13,100	16.2	11,900	18,000	29,800
1983	80,000	11,600	14.5	12,200	17,200	29,200
Bay						
1977	51,300	4,200	8.2	5,200	11,000	18,900
1978	50,300	3,400	6.8	4,800	11,100	19,100
1979	51,500	4,000	7.8	5,500	10,800	19,300
1980	54,100	8,000	14.8	5,600	9,400	19,600
1981	53,200	6,600	12.4	5,400	9,100	19,900
1982	52,700	8,400	15.9	4,900	8,400	18,900
1983	52,900	8,700	16.4	5,300	7,900	18,500
Benzie						
1977	4,175	475	11.4	675	550	1,425
1978	4,175	375	9.0	675	625	1,450
1979	4,425	575	13.0	675	700	1,375
1980	4,425	700	15.8	725	650	1,350
1981	4,625	925	20.2	700	600	1,350
1982	4,575	1,025	22.4	675	525	1,225
1983	4,675	1,050	22.5	750	550	1,225

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Berrien						
1977	75,600	6,900	9.1	8,800	26,500	30,200
1978	73,900	6,200	8.4	8,300	26,100	30,700
1979	74,300	6,700	9.0	8,800	25,100	30,500
1980	73,300	9,500	13.0	9,000	21,400	30,600
1981	72,900	9,500	13.0	8,700	21,000	29,900
1982	71,500	11,500	16.1	7,700	19,100	28,400
1983	71,500	11,100	15.5	7,900	18,600	28,800
Branch						
1977	22,525	1,750	7.8	3,725	4,750	4,875
1978	23,200	1,375	5.9	3,650	5,425	5,050
1979	23,500	1,850	7.9	3,950	5,375	4,750
1980	21,750	2,925	13.4	3,950	4,050	4,525
1981	20,575	2,525	12.3	3,600	3,725	4,300
1982	19,325	3,000	15.5	3,100	4,125	4,125
1983	18,800	2,500	13.3	2,825	3,450	3,775
Calhoun - see Barry, Calhoun						
Cass						
1977	23,575	1,725	7.3	2,325	4,175	3,675
1978	24,650	1,425	5.8	2,100	4,825	3,750
1979	23,125	1,850	8.0	2,200	4,150	3,550
1980	21,450	2,700	12.6	2,400	3,025	3,600
1981	21,275	2,375	11.2	2,225	3,350	3,625
1982	20,925	3,050	14.6	2,050	3,800	3,275
1983	22,725	2,650	11.7	2,075	3,400	3,475
Charlevoix						
1977	9,075	1,050	11.6	1,025	2,600	2,450
1978	9,500	950	10.0	1,050	2,725	2,775
1979	9,900	925	9.3	1,275	2,750	2,825
1980	9,550	1,400	14.7	1,375	2,175	2,800
1981	9,575	1,450	15.1	1,275	2,125	2,775
1982	9,675	1,775	18.3	1,250	1,900	2,675
1983	9,475	1,600	16.9	1,275	1,900	2,650
Cheboygan						
1977	9,200	1,900	20.7	900	1,100	3,050
1978	9,375	1,875	20.0	900	1,175	3,175
1979	9,800	1,575	16.1	1,050	1,275	3,375
1980	10,150	1,900	18.7	1,250	1,200	3,400
1981	10,525	2,100	20.0	1,050	1,200	3,500
1982	10,325	2,225	21.5	1,200	1,075	3,125
1983	10,425	2,550	24.5	1,125	925	3,250

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[a]	Manufacturing	Other[e]
Chippewa						
1977	13,025	2,325	17.9	4,275	475	4,150
1978	12,325	2,350	19.1	3,350	225	4,325
1979	11,750	2,100	17.9	3,625	300	4,100
1980	11,900	2,150	18.1	3,625	450	4,075
1981	12,725	2,550	20.0	3,500	550	4,250
1982	12,975	3,025	23.3	3,350	525	4,125
1983	12,900	2,875	22.3	3,475	475	3,975
Clare						
1977	9,325	1,250	13.4	1,250	975	2,325
1978	9,725	1,000	10.3	1,275	1,150	2,500
1979	9,950	1,050	10.6	1,425	1,050	2,625
1980	9,350	1,450	15.5	1,475	625	2,650
1981	9,650	1,425	14.8	1,425	575	2,725
1982	9,775	1,525	15.6	1,300	550	2,675
1983	10,325	1,625	15.7	1,325	525	2,925
Clinton, Eaton, Ingham, Ionia						
1977	219,900	17,000	7.7	63,500	42,000	74,600
1978	225,100	14,000	6.2	64,800	44,500	79,500
1979	231,300	13,000	5.6	66,200	44,700	83,800
1980	236,700	24,600	10.4	67,400	37,800	86,000
1981	243,400	24,700	10.1	65,400	40,900	86,400
1982	241,200	29,000	12.0	63,400	37,200	83,400
1983	244,900	24,700	10.1	65,300	39,100	84,400
Crawford						
1977	4,050	500	12.3	650	600	1,375
1978	3,900	475	12.2	600	550	1,375
1979	3,850	575	14.9	650	325	1,450
1980	3,875	600	15.5	675	300	1,525
1981	4,125	750	18.2	700	250	1,575
1982	4,475	775	17.3	750	275	1,500
1983	4,575	825	18.0	675	250	1,725
Delta						
1977	16,350	1,800	11.0	2,200	3,475	5,325
1978	15,925	1,625	10.2	2,200	3,350	5,700
1979	16,950	1,875	11.1	2,400	3,400	5,850
1980	17,175	1,975	11.5	2,500	3,075	6,350
1981	19,125	2,000	10.5	2,325	3,150	7,600
1982	18,600	3,350	18.0	2,250	2,800	6,550
1983	18,100	3,450	19.1	2,200	2,700	5,975

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 2 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment[a]		Wage and salary workers[b]		
		Number	Rate[c]	Government[d]	Manufacturing	Other[e]
Dickinson						
1977	11,475	875	7.6	2,000	2,125	5,050
1978	11,975	875	7.3	1,975	2,325	5,375
1979	12,425	850	6.8	2,100	2,325	5,650
1980	12,675	1,050	8.3	2,275	2,275	5,725
1981	12,850	1,575	12.3	2,175	2,100	5,425
1982	12,450	1,875	15.1	2,175	1,900	5,225
1983	13,075	1,550	11.9	2,175	1,950	5,500
Eaton - see Clinton, Eaton, Ingham, Ionia						
Emmet						
1977	13,025	1,250	9.6	1,350	1,125	5,975
1978	13,325	1,150	8.6	1,250	1,300	6,300
1979	13,450	1,275	9.5	1,300	1,375	6,200
1980	13,575	1,575	11.6	1,375	1,250	6,225
1981	14,000	2,000	14.3	1,425	1,150	6,125
1982	13,850	1,975	14.3	1,475	1,150	5,975
1983	14,050	2,075	14.8	1,400	1,050	5,925
Genesee, Shiawassee						
1977	212,100	18,600	8.8	28,000	83,100	80,800
1978	215,700	17,100	7.9	25,500	85,600	86,400
1979	223,400	19,600	8.8	28,300	85,100	88,300
1980	227,000	40,100	17.7	29,700	70,400	86,200
1981	225,700	34,000	15.1	28,200	72,600	86,900
1982	224,200	46,700	20.8	27,300	61,900	83,100
1983	221,500	36,700	16.6	27,300	65,000	83,900
Gladwin - see Midland, Gladwin						
Gogebic						
1977	8,075	1,000	12.4	1,525	975	2,500
1978	8,050	800	9.9	1,525	950	2,725
1979	8,275	650	7.9	1,550	925	2,875
1980	8,525	725	8.5	1,600	900	3,025
1981	9,000	950	10.6	1,525	675	3,250
1982	8,975	1,325	14.8	1,525	475	3,125
1983	8,725	1,450	16.6	1,525	575	2,875
Grand Traverse, Kalkaska, Leelanau						
1977	26,550	2,175	8.2	4,975	3,925	16,300
1978	39,500	2,925	7.4	5,350	4,475	18,650
1979	42,175	2,750	6.5	5,500	4,925	19,800
1980	43,675	3,875	8.9	6,125	4,625	20,275
1981	45,575	5,150	11.3	5,675	4,875	20,450
1982	44,450	6,000	13.5	5,275	4,475	19,775
1983	45,225	6,525	14.4	5,450	4,425	18,850

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County of group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Other[e]
Gratiot						
1977	18,000	2,725	15.1	1,750	3,225	6,175
1978	17,325	2,225	12.8	1,725	3,175	6,175
1979	16,400	1,675	10.2	2,000	2,850	6,175
1980	16,525	2,250	13.6	2,200	2,475	6,125
1981	16,650	2,025	12.2	2,000	2,825	5,975
1982	16,325	2,400	14.7	1,900	2,725	5,750
1983	16,375	2,225	13.6	1,825	2,750	5,550
Hillsdale						
1977	20,100	1,600	8.0	2,375	4,225	4,275
1978	20,425	1,100	5.4	2,150	4,725	4,500
1979	21,050	1,650	7.8	2,200	4,525	4,775
1980	20,500	2,350	11.5	2,375	3,550	5,000
1981	21,025	2,025	9.6	2,200	3,825	5,050
1982	20,850	3,000	14.4	2,100	3,400	4,975
1983	20,825	2,525	12.1	2,125	3,725	4,600
Houghton, Keewenaw						
1977	13,750	1,800	13.1	3,950	825	5,000
1978	15,600	1,750	11.2	4,200	825	5,950
1979	15,325	1,525	10.0	4,425	800	5,700
1980	15,600	1,825	11.7	4,650	850	5,650
1981	15,875	2,000	12.6	4,475	800	5,575
1982	15,900	2,375	14.9	4,350	650	5,375
1983	16,525	2,300	13.9	4,500	650	5,675
Huron						
1977	13,150	1,850	14.1	1,650	1,850	4,325
1978	13,900	1,550	11.2	1,675	2,800	4,350
1979	13,950	1,325	9.5	1,850	2,475	4,500
1980	14,200	2,325	16.4	2,000	2,200	4,625
1981	14,000	2,275	16.2	2,025	1,800	4,750
1982	13,750	2,400	17.5	1,900	1,625	4,675
1983	14,200	2,450	17.3	1,900	1,775	4,600
Ingham - see Clinton, Eaton, Ingham, Ionia						
Ionia - See Clinton, Eaton, Ingham, Ionia						
Isoco - see Alcona, Iosco						
Iron						
1977	6,150	650	10.6	1,075	575	1,725
1978	6,025	575	9.5	975	675	1,800
1979	6,075	575	9.5	1,050	625	1,750
1980	6,075	675	11.1	1,175	575	1,675
1981	6,600	1,050	15.9	1,150	650	1,650
1982	6,450	1,000	15.5	1,050	675	1,625
1983	6,925	875	12.6	1,125	850	1,600

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Others[e]
Isabella						
1977	25,250	1,775	7.0	6,575	1,150	6,950
1978	25,700	1,475	5.7	6,475	1,275	7,450
1979	25,975	1,450	5.6	6,650	1,250	7,525
1980	26,700	2,175	8.1	6,650	1,125	7,725
1981	28,350	2,125	7.5	6,950	1,000	8,350
1982	29,125	2,450	8.4	6,825	1,025	8,550
1983	30,850	2,850	9.2	6,400	1,050	9,150
Jackson						
1977	65,400	5,400	8.3	8,600	15,600	27,800
1978	65,700	3,800	5.8	8,400	16,400	29,000
1979	68,400	5,000	7.3	8,700	16,700	29,500
1980	67,300	7,700	11.4	9,000	14,500	28,900
1981	66,900	7,700	11.5	8,400	14,200	28,200
1982	66,900	10,800	16.1	8,000	12,000	27,000
1983	65,500	10,300	15.7	8,100	11,300	26,700
Kalamazoo, Van Buren						
1977	126,600	8,400	6.6	19,900	33,800	49,600
1978	128,300	7,500	5.8	19,400	34,600	52,900
1979	134,400	7,800	5.8	20,200	36,000	55,000
1980	135,500	11,300	8.3	20,500	32,900	56,400
1981	138,400	12,000	8.7	19,900	33,000	56,700
1982	137,400	15,100	11.0	19,400	31,200	54,500
1983	139,500	15,200	10.9	19,100	30,700	55,100
Kalkaska - see Grand Traverse, Kalkaska, Leelanau						
Kent, Ottawa						
1977	278,200	17,600	6.3	30,300	83,800	126,600
1978	294,400	14,700	5.0	30,100	90,500	138,800
1979	309,700	16,900	5.5	31,300	96,000	143,800
1980	311,300	25,900	8.3	32,600	89,000	144,500
1981	321,400	29,100	9.1	30,600	90,100	147,200
1982	325,300	38,600	11.9	29,600	85,000	146,700
1983	334,800	38,200	11.4	28,700	86,000	149,100
Keweenaw - see Houghton, Keweenaw						
Lake						
1977	2,725	250	9.2	450	75	450
1978	2,500	200	8.0	400	75	450
1979	2,750	350	12.7	500	50	475
1980	2,950	425	14.4	525	50	475
1981	3,075	450	14.6	500	50	525
1982	3,200	475	14.8	550	50	500
1983	3,050	475	15.6	500	25	500
Lapeer - see Lapeer, Livingston, Macomb, Oakland, St. Clair, Wayne						
Leelanau - see Grand Traverse, Kalkaska, Leelanau						

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Others[e]
Lenawee						
1977	37,925	3,650	9.6	4,275	12,025	11,150
1978	37,575	2,450	6.5	4,325	12,450	11,650
1979	39,150	3,175	8.1	4,625	12,450	12,000
1980	38,400	5,550	14.5	4,900	10,300	11,700
1981	38,425	5,350	13.9	4,800	10,325	11,425
1982	39,325	7,050	17.9	4,650	9,475	11,200
1983	39,275	6,150	15.7	4,575	9,900	11,325
Livingston, Lapeer, Macomb, Oakland, St. Clair, Wayne[f]						
1977	1,974.9	155.0	7.8	257.2	583.1	888.8
1978	2,011.4	132.8	6.6	255.6	608.9	935.2
1979	2,054.9	163.8	8.0	255.7	580.5	955.8
1980	2,016.0	263.2	13.1	250.9	491.4	934.2
1981	2,005.7	261.7	13.0	239.8	470.5	927.3
1982	1,980.3	316.5	16.0	299.7	419.5	905.0
1983	1,979.1	289.5	14.6	217.7	416.0	905.6
Luce						
1977	4,100	825	20.1	1,850	200	700
1978	3,275	725	22.1	1,250	175	650
1979	3,125	350	11.2	1,325	225	700
1980	3,050	400	13.1	1,350	125	700
1981	3,000	575	19.2	1,150	100	700
1982	2,825	500	17.7	1,050	75	725
1983	2,775	475	17.1	1,025	100	625
Mackinac						
1977	6,400	800	12.5	950	175	1,800
1978	6,450	750	11.6	900	125	2,000
1979	6,725	950	14.1	900	175	1,975
1980	6,900	1,075	15.6	975	175	1,950
1981	7,425	1,450	19.5	900	175	2,100
1982	7,850	1,700	21.7	900	150	2,025
1983	8,375	1,975	23.6	925	125	2,175
Macomb - see Livingston, Lapeer, Macomb, Oakland, St. Clair, Wayne						
Manistee						
1977	9,800	1,250	12.8	1,225	2,750	2,625
1978	9,900	1,125	11.4	1,225	2,900	2,700
1979	9,900	950	9.6	1,400	2,825	2,775
1980	9,900	1,275	12.9	1,525	2,525	2,725
1981	9,925	1,575	15.9	1,400	2,300	2,700
1982	9,475	1,800	19.0	1,325	1,750	2,700
1983	9,675	1,675	17.3	1,450	1,775	2,775

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[e]	Unemployment		Wage and salary workers[b]		
		Number[e]	Rate[c]	Government[a]	Manufacturing	Others[e]
Marquette						
1977	31,500	2,750	8.7	7,825	925	16,550
1978	34,300	2,525	7.4	8,000	950	19,750
1979	30,750	2,800	9.1	7,900	975	16,675
1980	30,700	4,050	13.2	8,100	875	15,750
1981	30,325	3,675	12.1	7,725	850	15,575
1982	31,025	6,975	22.5	7,325	775	13,700
1983	30,000	5,050	16.8	7,575	700	13,800
Mason						
1977	12,150	1,150	9.5	1,500	2,475	3,800
1978	12,200	950	7.8	1,475	2,650	3,925
1979	12,725	1,375	10.8	1,575	2,675	4,000
1980	12,800	1,650	12.9	1,700	2,425	4,025
1981	12,525	1,725	13.8	1,575	2,350	3,825
1982	12,675	2,350	18.5	1,575	1,875	3,625
1983	12,600	2,300	18.3	1,600	1,925	3,625
Mecosta						
1977	13,950	1,150	8.2	4,325	1,675	2,925
1978	14,125	950	6.7	4,200	1,700	3,225
1979	14,025	1,000	7.1	4,450	1,650	3,150
1980	14,875	1,350	9.1	4,875	1,600	3,250
1981	14,700	1,425	9.7	4,575	1,500	3,200
1982	14,750	1,675	11.4	4,425	1,275	3,025
1983	15,475	1,900	12.3	4,450	1,475	3,275
Menominee						
1977	10,300	700	6.8	1,425	2,925	2,475
1978	10,725	775	7.2	1,475	2,975	2,850
1979	11,175	800	7.2	1,625	2,850	3,050
1980	10,900	975	8.9	1,775	2,625	2,900
1981	11,200	1,000	8.9	1,675	2,850	2,850
1982	11,250	1,725	15.3	1,625	2,525	2,700
1983	11,550	1,925	16.7	1,625	2,325	2,800
Midland, Gladwin						
1977	36,800	3,225	8.8	4,100	13,600	14,550
1978	37,000	2,950	8.0	3,875	13,400	15,550
1979	37,275	2,850	7.6	4,175	13,100	15,825
1980	37,450	4,125	11.0	4,400	12,675	15,125
1981	37,950	4,150	10.9	4,100	12,325	15,775
1982	38,250	5,150	13.5	3,725	11,650	15,975
1983	38,175	5,550	14.5	3,825	10,975	15,325

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment Number[a]	Unemployment Rate[c]	Wage and salary workers[b] Government[d]	Wage and salary workers[b] Manufacturing	Wage and salary workers[b] Others[e]
Missaukee, Wexford						
1977	14,100	2,175	15.4	1,825	3,050	4,475
1978	13,750	1,725	12.5	1,825	3,425	4,700
1979	14,275	1,525	10.7	1,950	3,550	4,750
1980	14,550	2,250	15.5	2,150	2,900	4,925
1981	14,850	2,225	15.0	2,000	2,850	5,125
1982	15,800	2,775	17.6	1,975	2,700	5,325
1983	15,250	2,575	16.9	1,900	2,750	5,025
Monroe[g]						
1977	51,000	3,625	7.1			
1978	51,125	3,175	6.2			
1979	63,200	6,050	9.6			
1980	62,425	7,175	11.5			
1981	62,775	7,025	11.2			
1982	63,775	9,300	14.6			
1983	65,750	9,925	15.1			
Montcalm						
1977	18,825	3,050	16.2	2,325	4,500	5,350
1978	18,975	2,650	14.0	2,250	5,025	5,550
1979	19,325	1,875	9.7	2,500	5,550	5,675
1980	20,325	2,875	14.1	2,600	5,375	5,800
1981	20,850	3,100	14.9	2,350	5,700	5,750
1982	21,325	4,050	19.0	2,300	4,900	5,475
1983	22,700	3,750	16.5	2,375	5,950	5,500
Montmorency						
1977	2,800	275	9.8	375	675	600
1978	3,075	275	8.9	400	625	700
1979	3,200	450	14.1	350	675	675
1980	2,800	675	24.1	400	325	700
1981	2,525	575	22.8	350	275	675
1982	2,500	550	22.0	325	200	650
1983	2,800	700	25.0	400	250	725
Muskegon, Oceana						
1977	74,100	6,800	9.2	10,500	22,100	26,600
1978	74,100	6,300	8.5	9,900	22,000	28,200
1979	77,000	6,900	9.0	10,500	22,500	29,100
1980	78,400	10,400	13.3	10,900	20,300	29,100
1981	77,200	10,600	13.7	10,200	19,900	28,300
1982	77,600	14,000	18.0	9,700	18,600	28,300
1983	76,600	13,000	17.0	9,500	17,100	27,400

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Others[e]
Newaygo						
1977	12,825	1,500	11.7	1,725	1,800	2,525
1978	12,825	1,325	10.3	1,625	1,950	2,675
1979	12,625	1,350	10.7	1,725	1,800	2,725
1980	13,475	2,050	15.2	1,850	1,700	2,875
1981	14,075	2,350	16.7	1,650	1,725	3,000
1982	14,825	2,550	17.2	1,525	1,750	3,125
1983	15,275	2,600	17.0	1,675	1,825	3,175
Oakland - see Livingston, Lapeer, Macomb, Oakland, St. Clair, Wayne						
Oceana - see Muskegon, Oceana						
Ogemaw						
1977	7,025	850	12.1	725	825	1,775
1978	7,575	875	11.6	800	950	1,975
1979	7,775	800	10.3	725	975	2,150
1980	7,450	1,050	14.1	775	725	2,100
1981	7,475	1,000	13.4	750	750	2,075
1982	8,225	1,300	15.8	675	600	2,000
1983	8,700	1,450	16.7	900	675	2,275
Ontonagon						
1977	3,400	675	19.9	750	425	2,050
1978	3,200	550	17.2	825	425	2,050
1979	3,175	425	13.4	900	475	1,975
1980	3,400	425	12.5	950	550	2,050
1981	3,650	400	11.0	900	800	2,300
1982	3,875	925	23.9	875	650	2,075
1983	3,250	1,025	31.5	875	425	1,175
Osceola						
1977	7,175	800	11.1	1,200	1,850	1,150
1978	7,150	575	8.0	1,200	1,950	1,125
1979	7,375	700	9.5	1,425	1,850	1,175
1980	8,250	1,075	13.0	1,625	2,000	1,250
1981	8,625	1,000	11.6	1,350	1,950	1,425
1982	8,475	1,375	16.2	1,350	1,950	1,425
1983	8,600	1,400	16.3	1,300	1,850	1,450
Oscoda						
1977	2,475	400	16.2	325	325	400
1978	2,350	375	16.0	325	275	400
1979	2,350	350	14.9	400	225	450
1980	2,325	425	18.3	450	150	400
1981	2,350	475	20.2	425	100	450
1982	2,325	475	20.4	375	75	550
1983	2,500	550	22.0	400	100	475

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[c]	Rate[c]	Government[d]	Manufacturing	Others[e]
Otsego						
1977	7,000	625	8.9	1,050	925	2,675
1978	8,200	600	7.3	1,050	1,020	3,450
1979	9,250	625	6.8	1,200	1,175	3,750
1980	9,225	800	8.7	1,250	950	3,850
1981	9,575	925	9.7	1,100	1,075	3,850
1982	8,775	1,175	13.4	1,075	850	3,200
1983	8,700	1,075	12.4	925	900	3,325
Ottawa - see Kent, Ottawa						
Presque Isle						
1977	4,425	475	10.7	825	225	2,025
1978	4,500	500	11.1	850	175	2,150
1979	4,475	650	14.5	1,000	125	1,975
1980	4,725	900	19.0	1,050	175	1,975
1981	5,025	975	19.4	950	150	2,150
1982	4,975	1,225	24.6	875	200	1,900
1983	4,500	1,100	24.4	875	175	1,575
Roscommon						
1977	5,500	675	12.3	1,000	475	1,850
1978	5,475	650	11.9	1,150	475	1,775
1979	5,700	700	12.3	1,325	450	1,850
1980	5,925	875	14.8	1,400	375	1,850
1981	6,100	925	15.2	1,300	350	1,950
1982	6,225	1,125	18.1	1,275	225	1,975
1983	6,375	1,150	18.0	1,325	200	1,950
Saginaw						
1977	97,000	6,700	6.9	11,100	34,400	40,500
1978	98,500	4,900	5.0	11,100	36,600	42,400
1979	101,600	6,600	6.5	11,600	36,200	42,700
1980	102,600	14,600	14.2	11,900	28,600	44,000
1981	101,000	12,200	12.1	11,300	29,300	43,200
1982	99,200	16,900	17.0	11,200	24,200	41,500
1983	98,300	13,800	14.0	11,000	24,700	41,600
St. Clair - see Livingston, Lapeer, Macomb, Oakland, St. Clair, Wayne						
St. Jospeh						
1977	23,175	1,850	8.0	3,025	9,100	6,000
1978	24,100	1,725	7.2	2,925	9,875	6,450
1979	25,200	2,600	10.3	3,375	9,300	6,575
1980	25,700	2,950	11.5	3,525	9,150	6,950
1981	26,000	2,550	9.8	3,250	9,625	6,825
1982	25,550	3,300	12.9	3,100	9,225	6,475
1983	25,425	2,850	11.2	3,200	8,925	6,350

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[a]	Rate[c]	Government[d]	Manufacturing	Others[e]
Sanilac						
1977	15,600	1,375	8.8	1,900	3,525	3,075
1978	15,500	1,350	8.7	1,850	3,625	3,225
1979	15,675	1,925	12.3	2,025	3,325	3,275
1980	16,125	2,925	18.1	2,200	2,775	3,400
1981	16,400	3,000	18.3	1,975	2,875	3,400
1982	16,300	3,325	20.4	1,950	2,650	3,450
1983	16,600	3,025	18.2	1,950	2,800	3,375
Schoolcraft						
1977	3,575	450	12.6	575	375	1,300
1978	3,725	475	12.8	675	350	1,350
1979	3,825	550	14.4	775	350	1,275
1980	3,800	550	14.5	775	350	1,275
1981	3,825	675	17.6	725	325	1,250
1982	4,025	850	21.1	725	350	1,200
1983	4,100	850	20.7	750	350	1,175
Shiawassee - see Genesee, Shiawassee						
Tuscola						
1977	24,000	2,275	9.5	3,525	2,875	4,975
1978	24,650	2,000	8.1	3,525	2,950	5,400
1979	25,300	2,225	8.8	3,850	3,000	5,400
1980	25,500	4,250	16.7	4,150	2,175	5,325
1981	24,575	3,650	14.9	3,450	1,850	5,075
1982	23,625	3,975	16.8	3,550	1,925	4,650
1983	23,450	3,950	16.8	3,550	1,925	4,650
Van Buren - see Kalamazoo, Van Buren						
Washtenaw						
1977	129,900	8,400	6.5	41,700	40,800	44,300
1978	135,700	7,100	5.2	41,700	44,000	49,000
1979	144,500	7,900	5.5	43,300	46,800	51,700
1980	144,500	11,700	8.1	45,500	40,800	53,200
1981	142,500	11,100	7.8	44,800	36,100	55,200
1982	140,900	14,000	9.9	44,100	31,900	54,500
1983	146,800	13,900	9.5	45,200	32,100	56,500
Wayne - see Livingston, Lapeer, Macomb, Oakland, St. Clair, Wayne						
Wexford - see Missaukee, Wexford						
Upper Peninsula						
1977	134,850	15,575	11.5	28,700	15,200	53,100
1978	138,250	14,550	10.5	28,800	15,400	56,300
1979	136,525	14,275	10.5	29,900	15,000	53,500
1980	137,675	16,800	12.2	31,300	14,200	52,900
1981	142,425	18,975	13.3	29,500	14,400	59,200
1982	143,350	27,025	18.9	28,400	12,700	50,300
1983	143,400	25,100	17.5	29,000	12,500	49,100

TABLE V-16. CIVILIAN LABOR FORCE, UNEMPLOYMENT, AND EMPLOYMENT IN MICHIGAN COUNTIES, BY PLACE OF RESIDENCE, AND WAGE AND SALARY WORKERS IN MICHIGAN COUNTIES, BY PLACE OF WORK: 1977-1983 (cont.)

(Average of 12 monthly figures)

County or group of counties	Civilian labor force[a]	Unemployment		Wage and salary workers[b]		
		Number[f]	Rate[c]	Government[d]	Manufacturing	Other[e]
Michigan[h]						
1977	4,112.0	336.0	8.2	596.8	1,128.4	1,717.3
1978	4,194.0	289.0	6.9	611.4	1,179.6	1,818.4
1979	4,312.0	335.0	7.8	621.0	1,160.1	1,855.9
1980	4,292.0	534.0	12.4	627.8	998.9	1,816.1
1981	4,305.0	529.0	12.3	598.4	979.0	1,786.9
1982	4,278.0	661.0	15.5	579.3	874.1	1,735.9
1983	4,303.0	610.0	14.2	576.0	880.8	1,729.6

SOURCE: Michigan Employment Security Commission, special release.

a. Labor force includes persons involved in labor disputes. Employment and unemployment figures are on the basis of place of residence; wage and salary figures by place of work.

b. By place of work as opposed to place of residence.

c. Unemployment as a percentage of civilian labor force. Civilian labor force data are developed on the basis of questions asked at a sample of households, whereas the number of nonfarm wage and salary jobs is estimated by querying selected employers. The difference between the two stems largely from nonfarm self-employment (lawyers, dentists, physicians, and other professionals in private practice; domestic workers; "mom and pop" grocery stores, restaurants, and motels; and so forth), agricultural employment (both owners and their employees), workers involved in labor disputes who otherwise would be employed, multiple jobholding on the part of some employed persons, and sampling differences. Also, a worker might be employed in a factory or office in one state, and counted there in the employer survey, but live in another state, and be counted there in the household survey.

d. Federal, state and local. Includes public school employees and faculty and others employed full and part time at publicly owned universities.

e. Construction, transportation, communication, public utilities, wholesale trade, retail trade, finance, insurance, real estate, services, and mining.

f. Totals in thousands.

g. Monroe is part of the Toledo, Ohio, labor market area. Separate data for place of work are not compiled.

h. All 83 counties, including Monroe, totals are in thousands.

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TABLE V-17. CIVILIAN NONFARM WAGE AND SALARY JOBS IN MICHIGAN, DATA BASED ON AN EMPLOYER SURVEY, BY INDUSTRY: 1971-1983

(Averages of 12 monthly estimates, in thousands of jobs)

Industry	1971	1972	1973	1974
Manufacturing industries	1,059.2	1,097.4	1,178.8	1,114.0
Durable goods industries	879.5	879.5	953.1	897.2
Lumber and wood products	14.1	15.2	16.1	15.5
Furniture and fixtures	19.6	20.8	22.5	21.9
Metal industries	227.4	234.6	252.5	235.5
Primary metal products	86.8	87.6	95.6	93.9
Fabricated metal products	140.6	147.0	156.9	141.6
Machinery (nonelectrical)	137.3	140.3	155.6	158.1
Electrical machinery	40.6	42.3	47.1	45.4
Transportation equipment	368.1	384.3	416.0	377.6
Motor vehicles and equipment	353.6	369.6	401.0	366.1
Other	14.5	14.7	15.0	11.5
Other durable goods	40.0	42.0	43.3	43.2
Nondurable goods industries	212.1	217.9	225.7	216.8
Food and kindred products	53.4	52.3	51.7	51.8
Textile mill products and apparel	23.6	24.9	27.3	24.7
Paper and allied products	26.8	26.5	26.9	26.3
Printing, publishing, and allied industries	34.2	36.7	36.9	35.5
Chemicals and petroleum refining and related industries	45.0	44.7	45.6	44.4
Other nondurable goods	29.1	32.8	37.3	34.1
Private nonmanufacturing industries[a]	1,426.4	1,494.7	1,571.1	1,601.1
Contract construction	120.5	127.5	131.4	125.8
Transportation, communication, and public utilities	148.2	148.0	153.6	153.2
Wholesale trade	144.8	146.0	150.6	153.5
Retail trade	460.7	478.9	503.3	510.9
Finance, real estate, and insurance	121.0	127.7	130.3	134.2
Selected services	420.1	454.6	489.0	510.1
Mining	11.1	12.0	12.9	13.4
Government	509.5	526.9	534.4	562.6
Federal	54.9	55.3	55.0	56.3
State	117.8	122.5	123.9	127.5
Local	336.8	349.1	355.5	378.8
TOTAL	2,995.1	3,119.0	3,284.3	3,277.7

TABLE V-17. CIVILIAN NONFARM WAGE AND SALARY JOBS IN MICHIGAN, DATA BASED ON AN EMPLOYER SURVEY, BY INDUSTRY: 1971-1983 (cont.)

(Averages of 12 monthly estimates, in thousands of jobs)

1975	1976	1977	1978	1979	1980	1981	1982	1983
983.7	1,061.7	1,128.4	1,179.6	1,160.1	998.9	979.0	876.9	880.8
778.2	845.4	905.9	952.8	935.1	795.0	778.1	684.5	687.8
12.8	14.1	14.4	14.4	14.1	11.6	10.5	9.7	10.5
18.6	19.6	20.0	21.5	23.0	23.0	23.0	21.6	21.6
199.9	223.5	237.3	247.2	238.8	185.3	182.5	152.8	153.1
79.5	86.2	91.6	91.7	88.0	67.3	65.0	51.1	50.5
120.4	137.3	145.7	155.5	150.8	118.0	117.5	101.7	102.6
136.6	138.0	150.6	159.8	167.2	158.4	154.8	132.1	116.6
38.2	39.6	40.9	42.7	41.9	34.9	33.0	30.4	29.9
332.8	370.5	400.1	423.7	405.6	340.2	334.9	302.7	321.0
321.2	357.7	386.5	409.6	392.7	326.3	319.4	286.5	303.2
11.6	12.8	13.6	14.1	12.9	13.9	15.5	16.2	17.8
39.3	40.1	42.6	43.5	44.5	41.6	39.4	35.2	35.1
205.5	216.3	222.5	226.8	225.0	203.9	200.9	192.4	193.0
51.2	51.3	51.9	52.3	52.1	48.8	46.9	46.1	45.1
22.2	25.9	27.3	27.7	25.8	19.2	19.3	17.3	19.0
23.5	24.6	24.4	23.7	23.8	21.6	21.7	20.4	20.1
34.6	33.7	32.3	33.6	34.1	33.2	33.2	32.7	33.0
45.9	48.1	49.7	48.7	47.8	47.5	46.6	44.9	42.8
27.8	32.7	36.9	40.8	41.4	33.6	33.2	31.0	33.0
1,569.8	1,626.8	1,717.3	1,818.4	1,855.9	1,816.1	1,786.9	1,738.6	1,729.6
106.3	110.0	122.8	138.8	139.5	116.8	106.8	89.5	85.9
144.8	145.6	150.8	155.9	160.6	152.2	147.9	143.3	136.7
146.9	148.8	151.8	164.2	170.4	161.5	157.9	150.7	147.8
509.6	531.1	557.1	584.9	590.9	572.1	556.8	542.6	542.8
134.0	136.9	142.2	147.4	154.5	156.5	155.0	151.9	151.2
514.4	541.2	580.5	613.9	626.8	644.5	649.6	650.2	656.5
13.8	13.2	12.1	13.3	13.2	12.5	12.9	10.4	8.7
5[illegible]3.1	594.6	596.8	611.4	621.0	627.8	598.4	577.8	576.0
56.1	55.5	54.7	54.6	56.7	58.2	55.9	55.9	55.5
132.6	135.1	136.9	143.6	147.7	152.3	147.8	142.2	141.1
394.4	404.0	405.2	413.2	416.6	417.3	394.7	379.7	379.4
3,136.6	3,283.1	3,442.5	3,609.4	3,637.0	3,442.8	3,364.3	3,193.3	3,186.4

SOURCE: Michigan Employment Security Commission, special release.

a. Excludes domestic workers and agricultural employment.

TABLE V-18. CIVILIAN WAGE AND SALARY EMPLOYMENT IN MAJOR MICHIGAN LABOR MARKETS, DATA BASED ON EMPLOYER SURVEY, LABOR MARKET AREA, BY INDUSTRY: 1983

(Averages of 12 monthly estimates, in thousands of jobs)

Industry	Ann Arbor	Battle Creek	Bay City	Benton Harbor	Detroit
Manufacturing industries	32.1	17.2	7.9	18.6	416.0
Durable goods industries	27.7	8.0	5.6	13.9	345.0
Lumber and wood products	0	0	.1	.2	1.3
Furniture and fixtures	(D)	(D)	(D)	(D)	1.3
Metal industries	2.2	2.5	.7	3.7	73.9
Primary metal products	.1	.9	(D)	2.3	24.6
Fabricated metal products	2.1	1.6	(D)	1.4	49.3
Machinery (nonelectrical)	2.8	3.7	(D)	3.4	73.9
Electrical machinery	(D)	(D)	1.0	(D)	6.7
Transportation equipment	15.5	.4	2.9	1.5	185.3
Motor vehicles and equipment	(D)	(D)	(D)	(D)	175.1
Other	(D)	(D)	(D)	(D)	10.2
Other durable goods	7.2	1.4	.9	5.1	13.7
Nondurable goods industries	4.4	9.2	2.3	4.7	71.0
Food and kindred products	.4	7.0	.5	.9	15.7
Textile mill products and apparel	(D)	(D)	(D)	(D)	12.0
Paper and allied products	.3	1.1	(D)	.8	3.3
Printing, publishing, and allied industries	2.2	.6	.3	1.5	15.0
Chemicals and petroleum refining and related industries	(D)	.1	(D)	.1	12.2
Other nondurable goods	1.5	.4	1.5	1.4	12.8
Private nonmanufacturing industries[a]	56.5	29.2	18.5	28.8	905.6
Contract construction	3.8	1.6	.9	2.2	37.3
Transportation, communication, and public utilities	3.0	2.0	1.5	2.3	71.3
Wholesale trade	3.5	1.4	1.8	2.2	81.3
Retail trade	17.1	8.5	6.7	8.5	270.8
Finance, real estate, and insurance	4.2	4.0	1.3	1.9	87.7
Selected services	24.9	11.7	6.3	11.7	356.4
Mining	(D)	(D)	(D)	(D)	0.8
Government	45.2	12.2	5.3	7.9	217.7
Federal	2.4	4.3	.3	.4	30.8
State	31.7	.6	.3	.6	28.8
Local	11.1	7.3	4.7	6.9	158.1
TOTAL	133.8	58.6	31.7	56.3	1,539.3

TABLE V-18. CIVILIAN WAGE AND SALARY EMPLOYMENT IN MAJOR MICHIGAN LABOR MARKETS, DATA BASED ON EMPLOYER SURVEY, LABOR MARKET AREA, BY INDUSTRY: 1983

(Averages of 12 monthly estimates, in thousands of jobs)

Flint	Grand Rapids	Jackson	Kalamazoo	Lansing	Muskegon	Saginaw	Upper Peninsula
65.0	86.0	11.3	30.7	39.1	17.1	24.7	12.5
61.9	60.9	9.2	13.5	34.7	14.2	22.3	7.8
.1	1.4	(D)	.2	.3	.1	.1	2.9
(D)	15.1	(D)	(D)	.3	1.0	.0	.7
9.4	17.1	3.2	5.7	3.8	3.2	7.8	.9
(D)	3.6	.6	1.4	(D)	2.0	(D)	.7
(D)	13.5	2.6	4.3	(D)	1.2	(D)	.2
1.4	12.3	2.0	2.4	2.8	6.2	2.3	1.3
1.7	3.8	.7	.1	.1	(D)	(D)	(D)
48.6	4.0	2.5	2.4	26.7	(D)	11.4	1.0
(D)	2.0	(D)	(D)	(D)	(D)	(D)	(D)
(D)	2.0	(D)	(D)	(D)	(D)	(D)	(D)
.7	7.2	.8	2.7	.7	3.7	.7	1.0
3.1	25.1	2.1	17.2	4.4	2.9	2.4	4.7
.8	6.5	.6	1.8	1.0	.3	1.3	.8
.2	3.2	.1	(D)	(D)	(D)	(D)	(D)
.3	1.6	(D)	4.8	(D)	(D)	(D)	2.9
.9	4.1	.4	1.5	1.3	.4	.4	.8
(D)	5.5	(D)	7.3	(D)	.8	.5	.1
.9	4.2	1.0	1.8	2.1	1.4	.2	.1
83.9	149.1	26.7	55.1	84.4	27.4	41.6	49.1
3.5	9.3	1.0	3.4	3.7	1.9	1.9	3.5
5.3	10.4	5.0	3.8	5.5	2.8	4.5	4.6
10.9	16.9	1.8	3.8	7.3	1.7	2.7	2.6
29.4	48.1	7.8	18.3	27.8	9.3	14.5	17.2
5.9	10.9	1.6	4.0	9.7	1.4	3.8	3.3
28.9	53.1	9.5	21.8	30.4	10.2	14.2	15.3
(D)	.4	(D)	(D)	(D)	.1	(D)	2.6
27.3	28.7	8.1	19.1	65.3	9.5	11.0	29.0
1.4	2.0	.5	1.0	2.8	.4	1.3	3.3
2.1	2.6	2.1	7.0	38.7	1.0	1.4	8.5
23.8	24.1	5.5	11.1	23.8	8.0	8.3	17.2
176.2	263.8	46.1	104.9	188.8	54.0	77.3	90.6

SOURCE: Michigan Employment Security Commission, special release.
NOTE: Labor Market Areas are the same as Standard Metropolitan Statistical Areas, except for Benton Harbor (Berrien County), Port Huron (St. Clair County), and Upper Peninsula (15 counties) which are not SMSAs.
a. Excludes domestic workers and agricultural employment.
(D): Withheld to avoid disclosing data for individual companies.

TABLE V-19. TRANSACTIONS AFFECTING THE BALANCE IN THE MICHIGAN UNEMPLOYMENT COMPENSATION FUND, FISCAL YEARS: 1954-1983

(In thousands of dollars)

Fiscal year	Employers' contributions	Interest earned and credited	Miscellaneous transactions	Cumulative net income to fund[a]	Net benefit payments	Cumulative benefit payments[a]	Balance in fund
1954	81,546.8	10,313.8	---	1,151,535.0	96,097.9	740,570.1	410,965.0
1955	61,695.5	8,652.9	---	1,221,883.3	114,805.2	855,375.3	366,508.1
1956	61,471.7	8,231.1	---	1,291,586.2	105,559.3	960,934.6	330,651.6
1957	96,133.5	7,620.4	1,847.1[b]	1,397,187.2	134,977.2	1,095,911.8	301,275.5
1958	113,509.3	7,030.4	3,755.6[b]	1,521,482.5	269,470.4	1,365,382.2	156,100.3
1959	121,143.9	2,546.9	114,704.5[b]	1,759,877.8	193,522.4	1,558,904.6	200,973.2
1960	154,066.2	2,830.3	---	1,916,774.3	135,611.5	1,694,516.1	222,258.2
1961	149,374.3	2,820.1	---	2,068,968.7	224,542.4	1,919,058.5	149,910.2
1962	159,179.2	1,458.1	---	2,229,606.0	134,753.3	2,053,811.8	175,794.1
1963	164,334.9	3,034.0	---	2,396,974.9	100,079.4	2,153,891.2	243,083.7
1964	187,927.1	6,664.6	---	2,591,566.6	81,581.0	2,235,472.3	356,094.3
1965	181,154.7	11,304.2	8,131.5[c]	2,775,893.9	64,666.0	2,300,138.3	475,755.7
1966	178,441.2	15,941.7	26,100.0[c]	2,944,176.8	61,990.0	2,362,128.3	582,048.6
1967	161,241.0	20,120.3	28,800.0[c]	3,097,230.1	110,923.2	2,473,051.5	624,178.7
1968	127,967.4	22,199.5	84,860.6[c]	3,162,536.5	118,523.9	2,591,575.4	570,961.1
1969	125,969.1	25,026.4	---	3,313,532.0	109,506.0	2,701,081.3	612,450.7
1970	125,788.5	28,382.5	---	3,467,703.0	178,076.2	2,879,157.6	588,545.5
1971	128,120.4	24,797.4	---	3,620,620.8	359,659.3[d]	3,238,816.9	381,804.0
1972	232,574.7	15,199.6	---	3,868,395.4	284,871.9[d]	3,523,688.8	344,706.6
1973	338,939.6	19,086.9	---	4,226,421.8	214,737.6[d]	3,738,426.4	487,995.4
1974	313,218.6	29,504.9	---	4,539,640.4	330,066.5[d]	4,068,492.9	500,652.4
1975	299,102.7	18,383.2	81,000.0[e]	4,938,126.3	813,219.0[d]	4,881,711.9	85,919.3
1976	368,355.1	15,426.0	490,000.0[e]	5,796,496.8	727,131.5[d]	5,608,843.4	217,158.3
1977	558,208.6	0	53,000.0[e]	6,357,432.1	523,723.5[d]	6,132,566.9	304,643.4
1978	680,179.3	248.8[f]	---	6,698,039.8	439,511.8[d]	6,672,933.5	598,833.0

TABLE V-19. TRANSACTIONS AFFECTING THE BALANCE IN THE MICHIGAN UNEMPLOYMENT COMPENSATION FUND, FISCAL YEARS: 1954-1983 (cont.)

(In thousands of dollars)

Fiscal year	Employers' contributions	Interest earned and credited	Miscellaneous transactions	Cumulative net income to fund[a]	Net benefit payments	Cumulative benefit payments[a]	Balance in fund
1979	730,733.7	6,753.1	---	7,435,526.5	498,512.0[d]	7,221,718.8	837,807.7
1980	635,368.9	3,529.2	540,000.0[e]	8,074,737.9	1,254,019.1[d]	8,425,464.5	138,686.7
1981	620,525.8	0	475,000.0[e]	8,694,950.4	1,003,276.6[d]	9,428,741.1	230,936.0
1982	602,923.4	0	788,840.0[e]	8,903,348.0	1,566,817.8[d]	10,995,558.9	55,881.6
1983	822,327.9	0	500,488.0[e]	9,725,675.9	1,313,084.8[d]	12,308,643.7	65,609.7

SOURCE: Michigan Employment Security Commission, *Annual Report*, 1954 through 1983 (Lansing: annually).

a. 1 January 1937 - 30 September 1981.

b. Includes funds credited to the Michigan account in the Unemployment Trust Fund on 1 July of indicated year by the Secretary of the Treasury in accordance with the provisions of Title IX, Section 903 of the Social Security Act, as amended by Public Law 567, 83rd Cong., 2nd sess. (Reed bill) and $113 million advanced in September 1958 under provisions of Title XII, Section 1201, of the Social Security Act. Repayment of $15,381,202.36 was made through 30 June 1967 under automatic repayment provisions of the Federal Unemployment Tax Act.

c. Final repayments were made during 1968 by direct transfer from the fund of the outstanding balance on the 1958 loan of $113 million in the amount of $71,187,297.64 and on 1958-1959 TUC costs in the amount of $13,673,334.98. Installment repayments were also made annually by direct transfer from the fund on the loan balance in 1964, 1965, and 1966, and on TUC costs in 1965 and 1966.

d. Includes state share of extended benefits.

e. Advance from federal unemployment account.

f. Adjustment for prior years.

TABLE V-20. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY INDUSTRY, FIRST QUARTER: 1983

Industry	Average employment	Payrolls (000)	Average weekly earnings
Agriculture, forestry, and fisheries	13,367	$36,602	$210.06
Farms and agricultural services	13,104	36,077	211.78
Forestry and fisheries	263	525	153.40
Mining	8,313	56,954	527.02
Metal and coal mining	2,432	21,268	672.69
Crude petroleum and natural gas	4,248	27,580	499.42
Nonmetallic mining and quarrying	1,633	8,106	381.84
Construction	73,281	414,029	434.61
Building construction-general contractors	15,971	83,164	400.55
General contractors other than building	14,206	105,437	570.92
Construction-special trade contractors	43,104	225,428	402.30
Manufacturing	835,980	5,726,046	527.80
Foods and kindred products, and tobacco manufactures	43,028	225,333	402.84
Textile mill products	1,578	9,958	485.42
Apparel and other products	15,539	97,338	481.85
Lumber and wood products (except furniture)	9,572	35,003	281.29
Furniture and fixtures	21,258	129,884	469.99
Paper and allied products	19,285	119,001	474.67
Printing, publishing, and allied products	33,093	155,176	360.70
Chemicals and allied products	39,484	278,646	542.86
Petroleum refining and related industries	2,813	15,491	423.61
Rubber and misc. plastic products	30,279	146,431	372.00
Leather and leather products	2,917	11,066	291.82
Stone, clay, and glass products	13,717	82,671	463.61
Primary metal industries	49,613	348,720	540.68
Fabricated metal products	92,963	552,939	457.53
Machinery (except electrical)	114,687	751,077	503.76
Electrical machinery, equipment, and supplies	29,400	176,013	460.53
Transportation equipment	297,604	2,505,405	647.58
Professional, scientific, and controlling instruments	12,707	65,126	394.25
Miscellaneous manufacturing industries	6,443	30,768	367.34
Transportation, communication, and utilities	126,868	794,072	481.46
Local railways and bus lines	3,915	11,236	220.76
Motor freight, transportation, and warehousing	33,557	196,716	450.93

TABLE V-20. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY INDUSTRY, FIRST QUARTER: 1983 (cont.)

Industry	Average employment	Payrolls (000)	Average weekly earnings
Transportation (cont.)			
Water transportation	815	3,999	377.44
Transportation, other	11,316	59,516	404.57
Communication	40,155	262,940	503.70
Electric, gas, and sanitary services	37,110	259,665	538.24
Wholesale and retail trade	678,013	2,107,675	239.12
Wholesale trade	148,565	845,590	437.82
Retail building materials, hardware, and farm equipment	18,504	64,391	267.68
Retail general merchandise	81,097	228,462	216.70
Retail food	81,596	231,044	217.81
Retail automobile and gasoline service stations	56,935	209,333	282.82
Retail apparel and accessories	32,337	69,746	165.96
Retail furniture, home furnishings, and equipment	18,537	62,359	258.77
Eating and drinking places	176,435	242,646	105.79
Retail miscellaneous stores	64,017	154,104	185.17
Finance, insurance, and real estate	145,804	648,448	342.11
Credit agencies and banks	75,792	332,150	337.11
Insurance carriers	32,508	170,492	403.43
Insurance agents, brokers, & service	15,201	70,896	358.76
Real estate	20,615	63,424	236.66
Combined real estate, insurance, holding companies, and others	1,688	11,486	523.44
Services	589,144	2,285,131	298.36
Hotels, rooming houses, & camps	20,783	38,381	142.06
Personal services	33,772	74,012	168.58
Business service, miscellaneous	95,650	380,128	305.70
Automobile repair, services, & garages	19,965	67,645	260.63
Miscellaneous repair services	8,869	35,358	306.67
Motion pictures	4,262	11,605	209.46
Amusement and rcreation services, other	21,748	52,161	184.50
Medical and other health services	253,069	1,076,318	327.16
Legal services	19,128	125,818	505.97
Educational services	16,756	57,031	261.82
Social services	32,270	81,373	193.97
Museums, art galleries and zoos	1,126	2,810	191.98
Nonprofit membership organizations	22,926	63,279	212.32
Private households	2,810	4,781	130.88
Miscellaneous services	36,010	214,431	458.06
TOTAL	2,470,770	12,078,957	376.06

SOURCE: Michigan Employment Security Commission, special release.

TABLE V-21. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY COUNTY: FIRST QUARTER: 1982 AND 1983

	1982			1983		
County	Average employment	Total payrolls	Average weekly earnings	Average employment	Total payrolls	Average weekly earnings
Alcona	700	$ 1,797,099	$ 197.48	753	$ 1,705,156	$ 174.19
Alger	1,053	3,508,081	256.27	1,057	4,050,128	294.74
Allegan	13,059	46,770,543	275.50	13,232	48,721,133	283.24
Alpena	6,625	24,914,066	289.28	6,192	24,037,732	298.62
Antrim	2,306	7,224,391	240.99	2,209	5,922,607	206.24
Arenac	1,801	4,429,390	189.19	1,891	4,882,799	198.62
Baraga	1,327	3,696,645	214.29	1,165	3,361,092	221.93
Barry	5,147	20,811,384	311.03	4,788	19,222,541	308.83
Bay	25,663	108,847,725	326.26	24,995	106,131,735	326.62
Benzie	1,536	4,222,711	211.47	1,579	4,419,193	215.29
Berrien	44,757	187,125,518	321.61	43,164	192,324,628	342.74
Branch	7,072	26,128,911	284.21	7,054	26,894,836	293.29
Calhoun	38,974	171,919,506	339.32	35,401	164,036,323	356.44
Cass	5,634	20,051,099	273.77	6,076	22,711,624	287.53
Charlevoix	4,217	13,307,614	242.75	4,027	13,034,903	248.99
Cheboygan	3,193	10,364,609	249.70	3,099	9,912,089	246.04
Chippewa	3,743	10,627,003	218.40	3,466	9,319,708	206.84
Clare	3,014	8,180,539	208.78	2,988	8,382,373	215.80
Clinton	5,146	18,221,032	272.37	5,340	19,930,175	287.10
Crawford	1,689	4,417,259	201.18	1,702	4,179,182	188.88
Delta	8,190	31,778,651	298.48	7,719	29,992,328	298.89
Dickinson	6,551	23,365,252	274.36	6,785	24,831,301	281.52
Eaton	8,288	28,922,401	268.44	8,269	30,401,226	282.81
Emmet	6,102	19,203,846	242.09	6,109	20,196,460	254.31
Genesee	128,044	700,751,457	420.98	126,952	759,950,862	460.47

TABLE V-21. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY COUNTY: FIRST QUARTER: 1982 AND 1983 (cont.)

County	1982 Average employment	1982 Total payrolls	1982 Average weekly earnings	1983 Average employment	1983 Total payrolls	1983 Average weekly earnings
Gladwin	1,938	5,584,400	221.66	1,859	5,527,014	228.70
Gogebic	4,051	8,712,611	165.44	3,405	7,436,730	168.00
Grand Traverse	18,627	62,375,776	257.59	18,990	69,681,976	282.26
Gratiot	9,111	32,084,063	270.88	8,927	32,490,136	279.96
Hillsdale	7,751	26,681,06[illegible]	264.79	7,642	27,269,851	274.49
Houghton	5,692	16,651,41[illegible]	225.03	5,753	16,964,437	226.83
Huron	5,659	18,551,399	252.17	5,864	20,485,917	268.73
Ingham	95,022	437,696,810	354.33	92,809	484,353,840	401.45
Ionia	7,375	24,051,654	251.72	6,770	24,253,177	275.57
Iosco	3,096	8,882,821	220.70	3,113	9,589,438	236.96
Iron	2,023	5,370,420	204.21	2,242	6,016,683	206.43
Isabella	10,255	34,284,672	257.17	9,792	32,038,973	251.69
Jackson	38,930	172,439,378	340.73	35,916	165,049,114	353.49
Kalamazoo	72,625	322,520,099	341.61	72,624	340,061,709	360.19
Kalkaska	1,859	8,180,023	338.48	1,918	7,909,478	317.22
Kent	177,089	733,224,095	318.49	175,797	768,110,375	336.10
Keweenaw	66	132,861	154.85	65	132,964	157.35
Lake	443	987,977	171.55	435	933,760	165.12
Lapeer	6,907	22,890,569	254.93	7,075	23,689,761	257.57
Leelanau	1,434	3,019,198	161.96	1,390	2,931,291	162.22
Lenawee	19,234	76,608,540	306.38	17,952	75,837,868	324.96
Livingston	11,963	40,023,010	257.35	12,092	42,178,576	268.32
Luce	575	1,247,090	166.83	576	1,377,337	183.94
Mackinac	1,074	2,705,120	193.75	1,201	3,197,376	204.79
Macomb	154,654	732,024,688	364.10	154,999	775,073,666	384.65

TABLE V-21. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY COUNTY: FIRST QUARTER: 1982 AND 1983 (cont.)

	1982			1983		
County	Average employment	Total payrolls	Average weekly earnings	Average employment	Total payrolls	Average weekly earnings
Shiawassee	9,776	$ 33,445,061	$ 263.16	9,090	$ 31,925,431	$ 270.17
St. Clair	25,529	107,806,705	324.84	25,637	114,112,979	341.59
St. Joseph	14,062	52,621,934	287.86	13,152	52,352,628	306.20
Tuscola	6,365	22,105,945	267.16	6,199	22,005,482	273.06
Van Buren	9,711	34,473,358	273.07	9,330	32,016,300	263.96
Washtenaw	86,001	407,650,175	364.62	86,707	438,853,777	389.33
Wayne	720,785	3,752,306,502	400.45	691,231	3,776,559,175	420.27
Wexford	6,164	20,680,213	258.08	6,138	21,970,949	275.35
State-wide	45,951	203,094,521	339.99	46,852	211,811,738	347.76
TOTAL	2,535,308	11,732,460,079	355.97	2,470,774	12,078,961,725	374.60

SOURCE: Michigan Employment Security Commission, special release.

TABLE V-22. ESTIMATES OF WORKERS' COMPENSATION PAYMENTS IN MICHIGAN, BY TYPE OF INSURANCE: 1973-1983

(In thousands of dollars)

Year	Direct losses paid by private insurance carriers	State fund disbursements	Self-insurance payments
1973	220,471[a]	5,697	105,620
1974	248,052[a]	9,279	120,400
1975	267,160[a]	10,006	128,800
1976	328,457[a]	11,238	151,000
1977	271,349	12,273	168,000
1978	295,093	13,907	205,850
1979	355,681	16,680	152,055
1980	378,091	19,472	175,047
1981	404,255	21,927	199,340
1982	389,858	20,324	196,732
1983	349,704	21,376	193,975

SOURCE: 1979-1978, Michigan Department of Labor Workman's Compensation Division, special release; 1979-1981 Fund Administration Division, special release.

a. Direct losses incurred.

TABLE V-23. NUMBER OF MINERS, MINERS' WIDOWS, AND MINERS' DEPENDENTS RECEIVING BLACK LUNG BENEFITS, AND MONTHLY AMOUNT, MICHIGAN AND THE UNITED STATES: DECEMBER 1976-1982

Year	Number			Total	Monthly amount ($1,000)	
	Miners	Widows	Dependents		Miners	Widows
			Michigan			
1976	1,655	2,210	1,602	5,467	491	472
1977	1,531	2,273	1,506	5,310	485	521
1978	1,399	2,279	1,456	5,134	470	553
1979	1,295	2,276	1,292	4,863	473	595
1980	1,210	2,304	1,195	4,709	483	663
1981	1,105	2,329	1,076	4,510	462	702
1982	975	2,304	931	4,210	425	719
			United States			
1976	158,087	142,495	169,073	469,655	46,500	30,800
1977	148,720	144,543	164,136	457,399	47,100	33,400
1978	138,648	145,829	155,493	439,970	46,800	35,500
1979	129,558	146,527	142,863	418,948	47,800	38,700
1980	120,235	146,503	132,639	399,477	48,800	42,600
1981	111,249	146,173	119,083	376,505	47,300	44,400
1982	102,234	144,863	107,472	354,569	45,200	45,600

SOURCE: Social Security Administration, Social Security Bulletin, Table Q-37.

VI. INCOME AND COST OF LIVING

The following comments are excerpts from a mimeographed description of the personal income statistics issued by the Bureau of Economic Analysis, an agency within the U.S. Department of Commerce:

> BEA's personal income estimates are unique in that they provide its users with an economic base profile, extending over a span of more than forty years and covering more than three-thousand sub-areas, which can be combined into any multicounty geographic area needed. That is, it covers the Nation county-by-county; it is prepared annually, and it is presented in substantial industrial detail.
>
> Because of its conceptual scope and its richness of component detail, personal income can be used to measure and trace the levels and types of income flows received or earned by individuals residing or working in a specific political subdivision or micro-economy. Thus, it provides a local area data base for economic decision-making and for the implementation of those Federal, State or local government programs requiring an analysis of economic activities in, or the economic well-being of the residents of, a particular area. Specific applications include its use as a measure of the size of the consumer market; as an indirect measure of the industrial market; as a measure of the quality of a market and the economic welfare of an area's residents; as an indicator of an area's economic health; as an analytical framework which can be used in assessing an area's economy and against which alternative developmental programs can be evaluated or as a basis for gauging the capacity of an area to support public service expenditures.
>
> Personal income is the sum of several hundred individually estimated component flows, both monetary and non-monetary, and it encompasses most forms of income flowing to persons including Federal, State and local governments, households, institutions, and foreign governments.
>
> Two of the most important characteristics of the county income estimates are that they are constructed from a wide variety of statistical information not necessarily designed for income estimation; (this information consists mainly of data obtained from business and government records showing disbursements to individuals) and the BEA national and State estimates of personal income are used as statistical "frames of reference". Thus State

totals are allocated to the counties on the basis of the best available data. A detailed procedure of estimation is followed to maximize reliability and to obtain analytically useful information by county on income by type and by industry. This use of extensive detail is the hallmark of a reliable measurement effort because it reflects, with reasonable reliability, the interindustry or intercomponent differentials at both the State and county levels, and it provides the detail needed to audit the sources and methods of estimation. This approach has an added virtue in that it gives us the opportunity to take maximum advantage of the benevolent "law" of offsetting error.

It should also be emphasized that while the BEA estimates of county personal income and employment incorporate a great deal of basic data which may be presumed, from their general characteristics, to be "reliable," it also uses other data of differing quality, scope and relevance. In order to bridge the gaps or deficiencies in the poorer quality statistical source materials available for county income estimation, resort must be made to assumptions and indirect procedures.

Reliance on indirect methods and procedures makes it impossible to specify error in formal probabilistic or statistical terms. The importance of this limitation is increased by two circumstances; (a) the extent of indirect methods varies considerably over the forty-year estimating span, and (b) the industry structures of States and counties are differentially sensitive to such methods.

Personal Income Defined Personal income is the current income of residents of an area from all sources. It is measured after deduction of personal contributions to social security, government retirement, and other social insurance programs but before deduction of income and other personal taxes. It includes income received from business, Federal, State and local governments, households and institutions, and foreign governments. It consists of wages and salaries (in cash and in kind, including tips and bonuses as well as contractual compensation), various types of supplementary earnings termed other labor income (the largest item being employer contributions to private pension, health and welfare funds), the net incomes of owners of unincorporated businesses (farm and nonfarm with the latter including the incomes of independent professionals), net rental income, royalties, dividends, interest, and government and business transfer payments (consisting in general of disbursements to persons for which no services are rendered currently, such as unemployment benefits, social security payments, medicare benefits, retirement pay of governmental programs, and welfare and relief payments).

To measure personal income on a local area basis, criteria for allocating income or counties or SMSA's must be established. In the case of labor and entrepreneurial income, the criteria can be either the place-of-work of the income recipient or his place-of-residence. The difference between the two concepts is the net flow of commuters' earnings.

In BEA's local area income series, personal income is measure on a where-received (i.e., place-of-residence) basis; however, the bulk of the estimates of earnings[1] by broad industrial source are on a where-earned basis.

Earnings on a residence basis equals earnings on a place-of-work basis minus the earnings of persons who work in the given area but reside in another area, plus the earnings of persons who reside in the given area but work in another area.

Both measures of local area earnings are required. In the first construct, earnings, designated as "where-earned," are estimated by industry by place-of-work to provide a basis for the analysis of the industrial structure of a given area. In the second construct, designated as "where-received," earnings (where-earned) are adjusted to reflect place-of-residence which together with the other components of total personal income yields a useful basis for the analysis of consumer markets and purchasing power. When expressed on a per capita basis, the total personal income is an indicator of the economic well-being of the residents of a sub-area.

This adjustment to a place-of-residence is made to the all-industry earnings total for each county. A more precise method would be to convert the place-of-work earnings to a place-of-residence by computing adjustment factor for each major industry group, thus reflecting industrial differential in commuting flows. There is, however, little likelihood that the industrial detail needed to carry out such a procedure will be forthcoming in the near future.

---

[1] Earnings are the sum of wages and salaries, other labor income, and self-employment income.

> The distinction between place-of-work and residence cannot be applied to the other components of the income flow -- property income and transfer payment. In the case of property income an alternative criterion, resembling the place-of-work concept, is possible, i.e., the allocation of these incomes to the areas in which the businesses that generated them are located. However, conceptual and statistical difficulties that have not been satisfactorily resolved stand in the way of the application of this criterion. And even if these difficulties did not exist, it would not be advisable to apply the criterion to the property income component of personal income, since the latter cannot be transformed into a satisfactory measure of the contribution of capital to production, mainly because it excludes all components of profits other than dividends.

Readers of the Abstract who require additional detail of personal income for Michigan or its subdivisions, other than that published in this chapter are invited to contact the Bureau of Business Research, School of Business Administration, Wayne State University, which is a repository for these statistics.

Selected detail of transfer payments appears in Table VII-2. The personal income earnings components for industries were used as measures of the economic importance of government (Chapter X), agriculture (Chapter XII), construction (Chapter XIV), manufacturing (Chapter XV), trade (Chapters XX and XXI), finance, insurance, and real estate (Chapter XXI) and services (Chapter XXIII).

The poverty threshold is developed by the Bureau of the Census as a multiple of the income needed to purchase an "economy" diet, one that just meets minimum standards of nutrition and diversity. Government studies have shown that for households with three or more individuals, the multiple is three, that is, one-third of the budget goes for food. In two-person households, food absorbs 27 percent of the minimum adequate budget, and for single individuals the ratio is even smaller. Detroit area poverty data appear in Table VI-18 and Table VI-19.

Consumer price indexes are complied by the Bureau of Labor Statistics. Essentially, these represent the change in the cost of purchasing a fixed market basket of goods and services. CPIs are calculated for a selection of cities in the country, including Detroit. The national index is produced separately on basis of average prices of individual items nationally.

Cost of living comparisons may be made through family budget studies conducted by the Bureau of Labor Statistics (Tables VI-24 and VI-25). The moderate family budget allows for "the maintenance of health and social well-being, the nurture of children, and participation in community activities."

VI. INCOME AND COST OF LIVING

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TABLE V-21. EMPLOYMENT, PAYROLLS, AND AVERAGE WEEKLY EARNINGS IN MICHIGAN ESTABLISHMENTS COVERED UNDER THE REGULAR STATE UNEMPLOYMENT INSURANCE PROGRAM, BY COUNTY: FIRST QUARTER: 1982 AND 1983 (cont.)

	1982			1983		
County	Average employment	Total payrolls	Average weekly earnings	Average employment	Total payrolls	Average weekly earnings
Manistee	4,076	$ 16,523,998	$ 311.84	3,836	$ 15,479,663	$ 310.41
Marquette	15,277	58,831,783	298.95	13,034	50,484,175	297.94
Mason	5,025	16,445,120	251.43	4,695	15,870,357	260.02
Mecosta	3,867	10,196,701	204.47	4,388	12,729,437	223.15
Menominee	5,132	15,467,470	231.84	4,871	15,844,559	250.22
Midland	25,193	141,419,908	431.80	22,996	135,287,847	452.55
Missaukee	768	2,035,188	203.84	689	1,668,354	186.26
Monroe	20,217	101,301,800	385.44	20,183	114,642,640	436.94
Montcalm	10,269	36,705,647	274.95	10,971	42,722,140	299.55
Montmorency	629	1,264,759	154.67	1,125	2,636,207	180.25
Muskegon	43,206	185,193,339	329.71	39,282	176,054,747	344.76
Newaygo	4,598	15,796,333	264.27	4,537	16,131,173	273.50
Oakland	349,873	1,662,422,083	365.50	342,810	1,716,206,082	385.10
Oceana	1,891	5,036,795	204.77	1,918	5,220,521	209.37
Ogemaw	2,299	6,531,796	218.54	2,484	7,067,890	218.87
Ontonagon	2,907	12,483,314	330.33	1,487	6,032,886	312.08
Osceola	2,998	10,552,683	270.76	2,983	11,084,122	285.83
Oscoda	457	889,694	149.75	444	872,391	151.14
Otsego	3,775	11,773,686	239.91	3,755	11,985,082	245.52
Ottawa	44,050	164,140,798	286.63	44,112	174,470,363	304.24
Presque Isle	1,726	5,650,505	251.83	1,413	4,133,674	225.04
Roscommon	1,892	3,847,619	156.43	1,853	4,066,605	168.82
Saginaw	62,924	293,431,597	358.71	60,776	312,284,403	395.25
Sanilac	5,374	17,529,432	250.92	5,397	18,655,717	265.90
Schoolcraft	1,261	4,687,074	285.92	1,251	4,578,648	281.54

TABLE VI-1. TOTAL AND PER CAPITA PERSONAL INCOME IN MICHIGAN AND THE UNITED STATES: 1929-1983

	Total income (millions of dollars)			Per capita income (dollars)		
Year	Michigan	United States	Percentage[a]	Michigan	United States	Percentage
1929	3,770	84,894	4.44	786	697	112.8
1930	3,165	76,173	4.16	655	619	105.8
1931	2,590	65,377	3.96	540	527	102.5
1932	1,888	50,050	3.77	395	401	98.5
1933	1,664	46,916	3.55	348	374	93.0
1934	2,173	53,648	4.05	453	425	106.6
1935	2,560	60,239	4.25	529	473	111.8
1936	3,017	68,405	4.41	617	534	115.5
1937	3,382	73,721	4.59	681	572	119.1
1938	2,874	67,918	4.23	568	523	108.6
1939	3,199	72,301	4.42	620	552	112.3
1940	3,586	77,739	4.61	675	589	114.6
1941	4,493	95,103	4.72	822	713	115.3
1942	5,780	121,496	4.76	1,041	902	115.4
1943	7,242	147,772	4.90	1,342	1,097	122.3
1944	7,529	158,959	4.74	1,379	1,186	116.3
1945	7,190	163,359	4.40	1,315	1,225	107.3
1946	7,743	175,411	4.41	1,318	1,247	105.7
1947	8,829	188,539	4.68	1,453	1,312	110.7
1948	9,550	207,582	4.60	1,537	1,421	108.2
1949	9,516	204,918	4.64	1,503	1,378	109.1
1950	10,811	225,684	4.79	1,687	1,492	113.1
1951	12,066	252,485	4.78	1,857	1,647	112.8
1952	12,908	268,983	4.80	1,941	1,728	112.3
1953	14,663	284,866	5.15	2,149	1,800	119.4
1954	14,257	286,953	4.97	2,018	1,781	113.3
1955	15,825	307,601	5.14	2,172	1,872	116.0
1956	16,472	329,933	4.99	2,206	1,972	111.9
1957	16,917	348,309	4.86	2,235	2,044	109.3
1958	16,602	358,913	4.65	2,165	2,061	105.0
1959	17,625	382,548	4.61	2,269	2,160	105.0
1960	18,328	398,843	4.60	2,339	2,216	105.6
1961	18,281	414,285	4.41	2,316	2,264	102.3
1962	19,560	440,023	4.45	2,466	2,369	104.1
1963	20,887	462,406	4.52	2,592	2,454	105.6
1964	22,904	495,188	4.63	2,798	2,592	107.9
1965	25,511	536,152	4.76	3,053	2,772	110.1
1966	27,844	582,630	4.78	3,271	2,980	109.8
1967	28,967	623,757	4.64	3,357	3,161	106.2
1968	32,010	683,561	4.68	3,681	3,430	107.3

TABLE VI-1. TOTAL AND PER CAPITA PERSONAL INCOME IN MICHIGAN AND THE UNITED STATES: 1929-1983 (cont.)

	Total income (millions of dollars)			Per capita income (dollars)		
Year	Michigan	United States	Percentage[a]	Michigan	United States	Percentage
1969	34,862	747,536	4.66	3,970	3,714	106.9
1970	35,975	803,922	4.47	4,044	3,954	102.5
1971	39,068	861,904	4.53	5,355	4,167	104.5
1972	43,282	944,852	4.58	4,796	4,515	106.2
1973	48,383	1,058,902	4.57	5,333	5,010	106.4
1974	51,739	1,162,203	4.45	5,680	5,448	104.3
1975	54,540	1,258,643	4.33	5,988	5,842	102.5
1976	61,324	1,385,201	4.43	6,726	6,367	105.6
1977	69,290	1,534,708	4.51	7,567	6,984	108.3
1978	77,776	1,726,732	4.50	8,452	7,775	108.7
1979	85,981	1,943,579	4.42	9,296	8,655	107.4
1980	91,363	2,158,685	4.23	9,872	9,503	103.8
1981	97,891	2,426,901	4.03	10,653	10,582	100.6
1982	99,747	2,571,517	3.88	10,942	11,100	98.6
1983	104,963	2,731,791	3.84	11,572	11,675	99.1

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis.

[a] Michigan as a percentage of U.S.

TABLE VI-2. TOTAL AND PER CAPITA DISPOSABLE PERSONAL INCOME IN MICHIGAN AND THE UNITED STATES: 1958-1981

	Total income (Millions of dollars)			Per capita income (dollars)		
Year	Michigan	United States	Percentage	Michigan	United States	Percenage
1958	14,747	315,401	4.7	1,923	1,820	105.7
1959	15,589	335,007	4.7	2,007	1,900	105.6
1960	16,081	348,724	4.6	2,053	1,938	105.9
1961	16,139	362,467	4.5	2,045	1,981	103.2
1962	17,096	383,446	4.5	2,155	2,065	104.4
1963	18,182	402,344	4.5	2,256	2,135	105.7
1964	20,202	436,805	4.6	2,468	2,286	108.0
1965	22,406	471,557	4.8	2,681	2,438	110.0
1966	24,280	508,621	4.8	2,852	2,602	109.6
1967	25,138	542,238	4.6	2,913	2,747	106.0
1968	27,245	587,398	4.6	3,133	2,947	106.3
1969	29,078	632,946	4.6	3,311	3,144	105.3
1970	30,451	689,190	4.4	3,423	3,382	101.2
1971	33,369	746,142	4.5	3,719	3,608	103.1
1972	36,253	804,849	4.5	4,017	3,846	104.4
1973	40,881	909,247	4.5	4,506	4,302	104.7
1974	43,937	993,076	4.4	4,823	4,655	103.6
1975	46,937	1,090,778	4.3	5,153	5,063	101.8
1976	51,956	1,189,607	4.4	5,699	5,468	104.2
1977	58,057	1,309,219	4.4	6,340	5,957	106.4
1978	64,964	1,468,922	4.4	7,060	6,614	106.7
1979	71,681	1,643,846	4.4	7,750	7,320	105.9
1980	77,082	1,822,850	4.2	8,329	8,025	103.8
1981	82,071	2,040,564	4.0	8,906	8,897	100.1
1982	83,934	2,170,556	3.9	9,214	9,375	98.3

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-3. FUNCTIONAL COMPONENTS OF INCOME IN MICHIGAN AND THE UNITED STATES: 1977-1982

(Dollar figures in thousands)

	1977	1978	1979	1980	1981	1982
			Labor and proprietors' earnings, by place of work[a,b,c]			
Michigan	54,975,200	62,088,238	67,934,213	68,498,174	71,991,174	71,082,343
United States	1,170,847,000	1,321,521,000	1,477,121,000	1,592,947,000	1,748,818,000	1,826,710,000
Percentage[c]	4.7	4.7	4.6	4.3	4.1	3.9
			Social insurance contributions			
Michigan	2,571,664	2,933,772	3,327,494	3,361,546	3,840,364	3,876,137
United States	60,809,000	69,459,000	80,769,000	88,316,000	104,081,000	111,516,000
Percentage[c]	4.2	4.2	4.1	3.8	3.7	3.5
			Residence adjustment			
Michigan	326,075	374,545	429,607	441,443	462,806	467,009
United States[d]	-402,000	-441,000	-426,000	-488,000	-488,000	-559,000
Percentage[c]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
			Net labor and proprietors' earnings, by place of residence			
Michigan	52,729,611	59,529,011	65,036,326	65,578,071	68,621,616	67,673,215
United States	1,109,636,000	1,251,621,000	1,395,926,000	1,504,143,000	1,644,250,000	1,714,635,000
Percentage[c]	4.8	4.8	4.7	4.4	4.2	3.9
			Dividends, interest, and rent[e]			
Michigan	8,128,397	9,375,364	10,827,587	12,629,299	15,052,643	16,332,513
United States	217,175,000	251,267,000	297,393,000	352,213,000	445,476,000	482,411,000
Percentage[c]	3.7	3.7	3.6	3.6	3.4	3.4

TABLE VI-4. ANALYSIS OF THE LABOR AND PROPRIETORS' EARNINGS COMPONENT OF PERSONAL INCOME, BY INDUSTRIAL SECTOR, IN MICHIGAN AND THE UNITED STATES: 1977-1982[a]

Sector	Earnings, 1982		Percentage change	
	Millions of dollars	Percentage	1977 to 1982	1981 to 1982
	Michigan			
Manufacturing	27,219	38.29	14	-7
Nondurable goods	4,885	6.87	31	3
Durable goods	22,334	31.42	10	-9
Services	12,145	17.09	60	6
Retail trade	6,292	8.85	24	.37
Transportation and public utilities	4,290	6.04	43	3
Wholesale trade	3,915	5.51	44	1
Construction	2,659	3.74	5	-10
Finance, insurance and real estate	3,068	4.32	48	5
Farm	749	1.05	23	-11
Mining	320	0.45	20	-20
Agricultural services, forestry, fisheries, and other[b]	168	0.24	33	4
State and local government	8,660	12.18	46	5
Federal, civilian	1,337	1.88	45	5
Federal, military	262	0.37	39	13
TOTAL	71,082	100.00	29	-1
	United States			
Manufacturing	446,316	24.43	46	-.5
Nondurable goods	164,501	9.00	48	4
Durable goods	281,815	15.43	44	-3
Services	341,671	18.70	77	9
Retail trade	171,801	9.40	44	5
Transportation and public utilities	144,589	7.92	63	6
Wholesale trade	125,832	6.89	64	5
Construction	96,361	5.28	40	-.8
Finance, insurance and real estate	112,550	6.16	71	11
Farm	3,474	1.83	27	-16
Mining	37,301	2.04	107	5
Agricultural services, forestry, fisheries, and other[b]	7,469	0.41	138	5
State and local government	206,467	11.30	53	8
Federal, civilian	70,671	3.87	45	5
Federal, military	32,208	1.76	65	15
TOTAL	1,826,710	100.00	56	4

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a. Estimates based on 1972 standard industrial classification.

b. Includes wages and salaries of U.S. residents working for international organizations in the U.S.

TABLE VI-6. QUARTERLY PERSONAL INCOME IN MICHIGAN AND THE UNITED STATES, SEASONALLY ADJUSTED ANNUAL RATES: 1968-1983

(In millions of dollars)

Year and quarter	Michigan	United States	Year and quarter	Michigan	United States
1968			1969		
First	31,001	652,890	First	34,985	726,965
Second	31,679	670,441	Second	35,674	743,953
Third	32,389	686,839	Third	36,440	759.986
Fourth	33,321	700,974	Fourth	37,126	774,796
1970			1971		
First	36,475	786,609	First	37,065	827,995
Second	37,552	807,993	Second	37,552	807,993
Third	37,791	816,677	Third	39,355	857,893
Fourth	36,813	821,614	Fourth	40,345	874,406
1972			1973		
First	41,932	905,060	First	47,108	1,004,828
Second	42,909	920,203	Second	48,114	1,031,131
Third	43,666	941,186	Third	50,305	1,066,790
Fourth	45,220	975,403	Fourth	51,826	1,099,630
1974			1975		
First	51,300	1,107,391	First	52,212	1,197,357
Second	52,539	1,137,933	Second	53,565	1,230,670
Third	54,858	1,171,724	Third	55,455	1,267,216
Fourth	55,277	1,189,836	Fourth	57,093	1,298,542
1976			1977		
First	59,455	1,333,366	First	65,821	1,471,359
Second	61,188	1,356,675	Second	68,171	1,509,030
Third	61,985	1,385,519	Third	70,867	1,555,426
Fourth	63,972	1,421,988	Fourth	72,299	1,603,017
1978			1979		
First	74,167	1,638,945	First	84,471	1,865,078
Second	76,272	1,696,816	Second	85,195	1,909,144
Third	78,960	1,756,065	Third	86,657	1,974,649
Fourth	81,704	1,815,102	Fourth	87,607	2,027,061
1980			1981		
First	90,454	2,085,730	First	95,712	2,330,567
Second	89,355	2,112,018	Second	97,633	2,386,236
Third	91,109	2,179,468	Third	99,228	2,482,747
Fourth	94,533	2,257,524	Fourth	98,991	2,508,053
1982			1983		
First	98,094	2,520,173	First	102,309	2,647,192
Second	99,703	2,556,081	Second	104,518	2,703,256
Third	100,446	2,584,625	Third	105,318	2,752,504
Fourth	100,746	2,625,190	Fourth	107,707	2,824,210

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-3. FUNCTIONAL COMPONENTS OF INCOME IN MICHIGAN AND THE UNITED STATES: 1977-1982 (cont.)

(Dollar figures in thousands)

	1977	1978	1979	1980	1981	1982
Transfer payments[f]						
Michigan	8,432,048	8,871,296	10,117,277	13,443,127	14,196,175	15,795,950
United States	207,897,000	223,844,000	250,260,000	297,237,000	337,175,000	374,546,000
Percentage[c]	4.1	4.0	4.0	4.5	4.2	4.2
Personal income, by place of residence						
Michigan	69,290,056	77,775,671	85,981,190	91,650,497	97,870,434	99,801,678
United States	1,534,708,000	1,726,732,000	1,943,579,000	2,153,593,000	2,426,901,000	2,571,592,000
Percentage[c]	4.5	4.5	4.4	4.3	4.0	3.9

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a. See Table VI-4 for details.
b. Consists of wage and salary disbursements, other labor income, and proprietors' income.
c. Michigan as a percentage of United States.
d. Adjust for border workers: Income of U.S. residents working across U.S. borders less income of foreign residents working in the U.S.
e. See Table VI-5 for detail.
f. See Table VII-2. for detail.
n.a.: not applicable.

TABLE VI-5. ANALYSIS OF THE DIVIDEND, INTEREST, AND RENT COMPONENT OF PERSONAL INCOME IN MICHIGAN AND THE UNITED STATES: 1977-1982

(Dollar figures in thousands)

			Interest		Rent		
Year		Dividends	Monetary	Imputed[a]	Monetary	Imputed[b]	Total
1977	Michigan	1,474,699	3,871,121	2,030,423	323,292	428,862	8,128,397
	United States	39,562,000	101,770,000	51,027,000	16,706,000	8,110,000	217,175,000
	Percentage[c]	3.7	3.8	4.0	1.9	5.3	3.7
1978	Michigan	1,686,862	4,416,982	2,480,623	410,167	380,730	9,375,364
	United States	45,310,000	116,921,000	62,436,000	18,572,000	8,028,000	251,267,000
	Percentage[c]	3.7	3.8	4.0	2.2	4.7	3.7
1979	Michigan	1,857,877	5,404,696	2,846,726	415,682	302,606	10,827,587
	United States	50,757,000	145,408,000	73,319,000	20,657,000	7,252,000	297,393,000
	Percentage[c]	3.7	3.7	3.9	2.0	4.2	3.6
1980	Michigan	1,913,530	6,650,705	3,158,603	524,028	382,433	12,629,299
	United States	55,920,000	180,378,000	83,043,000	23,359,000	9,513,000	352,213,000
	Percentage[c]	3.4	3.7	3.8	2.2	4.0	3.6
1981	Michigan	1,895,082	8,562,016	3,426,230	629,228	540,087	15,052,643
	United States	62,802,000	250,413,000	90,876,000	28,038,000	13,347,000	445,476,000
	Percentage[c]	3.0	3.4	3.9	2.2	4.0	3.4
1982	Michigan	2,001,321	8,952,204	3,906,802	769,865	702,321	16,332,513
	United States	66,366,000	260,416,000	105,748,000	32,137,000	17,744,000	482,411,000
	Percentage[c]	3.0	3.4	3.7	2.4	4.0	3.4

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a. Value of financial services (mostly "free" checking accounts) rendered persons by banks and other financial institutions without charge plus income withheld by life insurance companies and mutual financial intermediaries on the account of persons, such as the addition of income to policy holder reserves held by life insurance companies.

b. Gross rental income imputed to nonfarm residents of owner-occupied nonfarm dwelling units less the normal expenses incurred in home ownership; that is, the net rent that nonrenters save from owning the homes they live in.

c. Michigan as a percentage of United States.

TABLE VI-7. TOTAL PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1974-1982

(In millions of dollars)

County	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alcona	28.7	32.8	37.9	43.0	48.0	54.7	60.9	67.8	72.3
Alger	30.4	34.4	38.9	43.5	48.5	52.6	56.6	60.2	62.0
Allegan	316.2	336.6	375.8	430.5	500.4	565.9	603.1	668.8	699.4
Alpena	140.4	155.3	171.3	189.4	214.4	237.6	256.1	274.0	273.4
Antrim	61.0	67.0	74.0	86.1	98.6	111.3	120.6	135.1	140.4
Arenac	53.0	55.7	65.3	74.2	80.2	89.7	98.2	108.3	112.5
Baraga	31.4	35.7	39.8	43.1	49.6	54.7	58.8	62.0	60.1
Barry	180.8	197.1	219.0	246.0	280.6	317.1	344.3	372.0	382.7
Bay	612.0	650.1	736.2	837.6	912.4	999.5	1,072.1	1,168.5	1,180.8
Benzie	41.0	44.6	50.1	58.3	66.0	72.9	77.9	86.8	90.8
Berrien	932.0	965.2	1,032.9	1,160.5	1,282.5	1,379.0	1,451.5	1,588.5	1,617.6
Branch	176.8	197.7	218.4	253.7	286.7	321.2	326.9	354.3	357.3
Calhoun	782.3	860.7	955.6	1,043.9	1,154.7	1,273.3	1,349.9	1,456.4	1,489.0
Cass	223.4	238.6	272.8	300.5	345.1	390.6	410.5	441.2	458.8
Charlevoix	78.2	87.4	97.4	112.6	128.0	143.9	155.8	166.5	171.5
Cheboygan	74.1	83.8	93.7	105.7	118.7	134.4	148.4	159.7	164.8
Chippewa	134.8	151.2	165.7	164.8	158.3	169.5	184.6	202.4	212.1
Clare	73.7	84.1	96.0	112.5	126.6	142.9	151.4	167.9	178.2
Clinton	254.1	271.7	303.5	347.0	401.9	451.7	488.3	542.8	549.8
Crawford	27.3	35.3	39.1	43.8	48.0	50.6	57.8	64.6	70.6
Delta	161.7	176.6	200.8	216.2	235.4	261.6	285.9	319.7	337.4
Dickinson	123.5	136.4	152.0	170.8	192.7	215.7	231.3	242.4	256.8
Eaton	378.3	423.5	479.4	565.8	628.6	719.8	776.1	867.0	886.5
Emmet	98.6	108.5	121.4	136.2	153.7	174.3	191.2	206.8	217.5
Genesee	2,445.0	2,635.5	3,143.6	3,623.2	3,979.5	4,351.7	4,551.3	5,016.3	4,887.3

TABLE VI-7. TOTAL PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1974-1982 (cont.)

(In millions of dollars)

County	1974	1975	1976	1977	1978	1979	1980	1981	1982
Gladwin	60.6	66.4	74.4	86.6	100.0	115.6	128.5	139.2	146.2
Gogebic	88.9	96.6	103.3	107.5	116.4	127.5	139.6	152.4	161.1
Grand Traverse	229.4	259.8	293.4	341.3	403.3	457.9	503.1	554.9	597.3
Gratiot	214.5	215.5	233.2	253.6	279.0	313.9	345.6	368.3	377.5
Hillsdale	187.0	195.2	217.5	248.2	277.3	305.8	313.2	347.7	358.6
Houghton	131.9	147.9	165.5	182.3	199.7	218.4	244.5	269.0	279.5
Huron	192.4	181.7	198.2	219.2	245.7	278.8	314.6	335.1	350.9
Ingham	1,444.0	1,598.5	1,822.4	2,043.7	2,271.5	2,532.0	2,716.9	2,985.3	3,075.7
Ionia	200.1	215.7	238.0	266.4	305.9	342.1	374.1	405.1	410.4
Iosco	118.7	129.7	145.0	155.5	170.0	187.5	200.8	219.6	236.9
Iron	55.7	63.0	70.0	77.0	84.3	94.8	103.8	114.5	119.0
Isabella	192.8	200.8	224.2	248.7	283.7	319.0	354.5	390.0	412.0
Jackson	792.8	848.8	913.9	1,016.6	1,146.1	1,264.7	1,334.2	1,442.8	1,461.9
Kalamazoo	1,133.0	1,235.0	1,370.6	1,535.0	1,718.7	1,926.9	2,103.1	2,304.9	2,390.3
Kalkaska	28.7	37.0	44.0	50.9	57.7	63.9	70.6	82.3	87.0
Kent	2,339.1	2,449.5	2,712.0	3,044.2	3,489.1	3,974.2	4,289.9	4,696.1	4,900.0
Keweenaw	7.9	8.7	9.6	9.7	10.9	11.9	13.2	14.8	15.4
Lake	23.2	24.8	27.6	30.8	34.8	39.1	43.7	47.2	50.4
Lapeer	279.8	296.8	342.5	420.1	484.3	544.0	573.8	620.0	636.0
Leelanau	61.2	62.6	67.7	82.0	96.0	101.5	108.2	123.5	130.0
Lenawee	444.9	477.7	525.0	601.9	666.0	741.7	786.8	846.1	857.0
Livingston	375.3	413.1	494.9	585.2	699.9	815.5	876.3	938.7	959.8
Luce	28.6	33.6	37.7	41.7	45.6	50.5	55.2	58.9	61.8
Mackinac	40.4	44.2	50.1	54.9	61.9	68.4	74.9	84.8	89.0
Macomb	4,079.8	4,284.0	4,962.7	5,783.0	6,565.7	7,307.8	7,660.4	8,286.3	8,442.5

TABLE VI-7. TOTAL PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1974-1982 (cont.)

(In millions of dollars)

County	1974	1975	1976	1977	1978	1979	1980	1981	1982
Manistee	86.3	99.5	110.5	126.9	143.2	158.0	170.9	187.6	188.9
Marquette	308.7	347.0	390.7	423.2	497.3	549.7	576.8	626.2	626.9
Mason	104.5	110.2	121.4	136.6	152.8	171.1	186.0	205.7	208.3
Mecosta	102.6	114.7	124.4	139.4	156.9	174.5	203.1	214.0	222.7
Menominee	102.8	111.2	123.3	137.9	158.6	178.3	191.1	211.4	217.9
Midland	391.6	423.3	483.1	545.9	607.7	680.8	730.2	811.4	821.2
Missaukee	29.7	33.7	37.1	40.3	46.9	52.9	59.3	66.4	70.0
Monroe	653.8	695.8	785.5	909.4	1,018.6	1,138.7	1,218.7	1,334.8	1,384.5
Montcalm	197.6	209.0	227.3	258.8	289.2	313.2	361.9	402.7	417.9
Montmorency	23.6	26.4	30.0	34.9	40.6	45.8	50.3	54.5	58.4
Muskegon	759.9	814.1	891.6	980.9	1,102.7	1,231.1	1,315.0	1,424.1	1,468.3
Newaygo	120.9	133.2	148.2	164.9	190.7	212.5	226.5	250.9	266.7
Oakland	6,938.5	7,366.1	8,342.7	9,682.6	11,095.8	12,382.7	13,040.7	13,914.3	14,185.3
Oceana	82.8	85.8	93.7	108.2	125.0	135.9	144.2	160.1	162.9
Ogemaw	49.9	55.6	63.3	70.9	77.8	90.4	99.0	108.5	113.8
Ontonagon	44.5	50.5	49.3	51.2	52.1	57.4	61.8	71.6	73.6
Osceola	66.5	71.6	73.7	84.2	93.1	103.2	117.6	128.6	137.4
Oscoda	18.4	20.6	23.1	25.4	27.8	30.7	34.0	37.1	39.1
Otsego	52.6	62.9	73.1	84.7	95.9	109.9	119.9	130.2	130.7
Ottawa	716.5	756.8	852.2	994.1	1,154.9	1,333.2	1,407.1	1,552.3	1,632.5
Presque Isle	51.7	57.5	62.7	69.9	78.0	85.4	94.0	103.1	105.9
Roscommon	49.6	58.3	66.9	76.8	85.7	97.6	111.0	125.9	136.0
Saginaw	1,222.8	1,294.4	1,511.5	1,714.0	1,886.2	2,063.5	2,181.0	2,349.3	2,325.6
St. Clair	640.8	687.1	774.0	882.7	1,006.3	1,097.2	1,169.9	1,268.6	1,318.3
St. Joseph	249.7	275.4	305.6	340.9	382.0	431.4	464.9	515.1	537.6

TABLE VI-7. TOTAL PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1974-1982 (cont.)

(In millions of dollars)

County	1974	1975	1976	1977	1978	1979	1980	1981	1982
Sanilac	179.3	180.0	198.7	224.4	252.1	282.8	308.1	337.1	344.9
Schoolcraft	31.5	36.6	40.0	44.5	49.0	54.9	60.0	64.8	71.0
Shiawassee	347.0	372.9	412.4	468.8	534.1	597.8	639.9	694.9	696.9
Tuscola	272.2	272.0	307.4	352.1	390.1	441.0	480.9	516.8	520.7
Van Buren	284.1	297.3	329.2	372.0	425.7	469.5	509.3	556.1	574.8
Washtenaw	1,406.7	1,533.7	1,750.8	1,993.7	2,271.7	2,549.3	2,765.3	2,946.9	3,033.0
Wayne	15,851.2	16,133.2	17,881.9	19,723.6	21,790.2	23,559.7	24,846.7	25,695.8	25,906.1
Wexford	92.0	100.9	114.6	131.9	145.3	162.7	178.8	196.9	213.3
Michigan	51,739.2	54,539.6	61,324.4	69,290.7	77,776.5	85,982.1	91,363.4	97,890.7	99,746.9
U.S.	1,162,203	1,258,643	1,385,201	1,534,708	1,727,032	1,943,983	2,158,685	2,426,901	2,571,592
Standard Metropolitan Statistical Area									
Ann Arbor	1,406.7	1,533.7	1,750.8	1,993.7	2,271.7	2,549.3	2,765.3	2,946.9	3,033.0
Battle Creek	782.3	860.7	955.6	1,043.9	1,154.7	1,273.3	1,349.9	1,456.3	1,489.0
Benton Harbor	932.0	965.2	1,032.9	1,160.5	1,282.5	1,379.0	1,451.5	1,588.5	1,617.6
Detroit	28,819.3	29,876.0	33,584.1	37,986.6	42,660.8	46,845.6	49,386.5	52,058.4	52,832.6
Flint	2,445.0	2,635.5	3,143.6	3,623.2	3,979.5	4,351.7	4,551.3	5,016.3	4,887.3
Grand Rapids	3,055.6	3,206.2	3,564.2	4,038.3	4,644.0	5,307.3	5,697.0	6,248.4	6,532.6
Jackson	792.8	848.8	913.9	1,016.6	1,146.1	1,264.7	1,334.2	1,442.8	1,461.9
Kalamazoo-Portage	1,133.0	1,235.0	1,370.6	1,535.0	1,718.7	1,926.9	2,103.1	2,304.9	2,390.3
Lansing-East Lansing	2,076.4	2,293.8	2,605.3	2,956.5	3,302.0	3,703.5	3,981.3	4,395.2	4,512.1
Muskegon-Muskegon Hghts-Norton Shores	759.9	814.1	891.6	980.9	1,102.7	1,231.1	1,315.0	1,424.1	1,468.3
Saginaw	2,226.4	2,367.8	2,730.8	3,097.4	3,406.3	3,743.8	3,983.3	4,329.3	4,327.6

SOURCE: Bureau of Economic Analysis, Regional Economics Information System, special release.

TABLE VI-8. PER CAPITA PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1974-1982

(In dollars)

County	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alcona	3,349	3,775	4,225	4,646	5,070	5,719	6,239	6,890	7,390
Alger	3,564	3,922	4,303	4,650	5,165	5,598	6,161	6,554	6,809
Allegan	4,366	4,551	4,958	5,561	6,353	6,996	7,368	8,179	8,447
Alpena	4,422	4,817	5,319	5,870	6,690	7,354	7,925	8,488	8,557
Antrim	4,090	4,376	4,762	5,457	6,131	6,773	7,449	8,310	8,512
Arenac	4,113	4,179	4,840	5,353	5,724	6,187	6,640	7,346	7,496
Baraga	3,945	4,392	4,851	5,113	5,748	6,304	6,957	7,334	7,142
Barry	4,392	4,655	5,098	5,650	6,352	6,991	7,492	8,126	8,318
Bay	5,077	5,397	6,107	6,893	7,476	8,255	8,978	9,823	10,001
Benzie	4,184	4,434	4,773	5,425	6,088	6,536	6,930	7,741	8,227
Berrien	5,418	5,567	5,907	6,636	7,395	7,942	8,501	9,416	9,786
Branch	4,455	5,068	5,536	6,412	7,103	7,826	8,150	9,001	9,125
Calhoun	5,470	6,034	6,713	7,312	8,049	8,946	9,567	10,409	10,667
Cass	4,808	5,025	5,712	6,252	7,138	7,887	8,277	8,903	9,464
Charlevoix	4,340	4,735	5,140	5,809	6,636	7,298	7,804	8,349	8,717
Cheboygan	3,889	4,342	4,750	5,293	5,915	6,618	7,168	7,676	7,913
Chippewa	3,730	4,160	4,457	4,495	5,093	5,608	6,434	6,938	7,279
Clare	3,663	4,019	4,401	5,029	5,534	6,131	6,327	6,987	7,367
Clinton	4,899	5,119	5,679	6,335	7,228	8,033	8,741	9,800	9,950
Crawford	3,415	4,278	4,443	4,828	5,260	5,390	6,084	6,772	7,341
Delta	4,272	4,577	5,139	5,509	6,006	6,680	7,357	8,181	8,546
Dickinson	5,060	5,481	6,062	6,730	7,492	8,392	9,159	9,607	10,156
Eaton	4,939	5,303	5,986	6,857	7,374	8,182	8,754	9,854	10,061
Emmet	4,665	4,990	5,518	6,152	6,814	7,597	8,306	8,962	9,365
Genesee	5,432	5,898	7,066	8,114	8,851	9,647	10,114	11,252	11,107

TABLE VI-8. PER CAPITA PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1974-1982 (cont.)

(In dollars)

County	1974	1975	1976	1977	1978	1979	1980	1981	1982
Gladwin	3,683	3,897	4,241	4,792	5,344	5,815	6,390	6,867	7,154
Gogebic	4,206	4,553	4,913	5,157	5,662	6,280	7,145	7,844	8,267
Grand Traverse	4,977	5,608	6,152	6,916	7,860	8,554	9,091	9,943	10,621
Gratiot	5,327	5,347	5,824	6,303	6,943	7,786	8,548	9,203	9,568
Hillsdale	4,665	4,823	5,332	6,047	6,676	7,405	7,440	8,336	8,659
Houghton	3,529	3,884	4,279	4,685	5,213	5,728	6,476	7,096	7,376
Huron	5,385	5,010	5,436	6,004	6,697	7,587	8,649	9,227	9,672
Ingham	5,372	6,017	6,824	7,651	8,441	9,397	9,968	10,861	11,321
Ionia	4,184	4,473	4,828	5,314	6,031	6,638	7,207	7,833	7,913
Iosco	4,290	4,697	5,157	5,393	5,900	6,499	7,109	7,772	8,192
Iron	4,106	4,555	4,981	5,470	6,000	6,765	7,658	8,413	8,749
Isabella	3,773	4,007	4,387	4,722	5,266	5,831	6,556	7,294	7,704
Jackson	5,397	5,739	6,154	6,764	7,565	8,332	8,818	9,668	9,850
Kalamazoo	5,592	6,062	6,656	7,398	8,222	9,163	9,893	10,849	11,170
Kalkaska	4,143	4,933	4,302	5,197	6,134	5,960	6,331	7,480	7,812
Kent	5,562	5,816	6,398	7,117	8,081	9,069	9,624	10,498	10,849
Keweenaw	3,951	4,321	4,599	4,685	5,415	6,043	6,767	7,718	7,650
Lake	3,398	3,514	3,851	4,121	4,605	4,964	5,658	5,941	6,187
Lapeer	4,666	4,828	5,454	6,534	7,279	7,882	8,145	8,879	9,123
Leelanau	4,948	4,955	5,231	6,188	7,089	7,111	7,697	8,732	9,066
Lenawee	5,094	5,426	5,939	6,782	7,406	8,188	8,759	9,466	9,660
Livingston	5,068	5,397	6,199	6,907	7,710	8,435	8,632	9,346	9,551
Luce	4,107	4,881	5,364	5,924	6,547	7,344	8,355	9,217	10,033
Mackinac	3,922	4,289	4,870	5,298	5,907	6,654	7,402	8,348	8,752
Macomb	6,223	6,517	7,500	8,603	9,642	10,596	11,012	11,998	12,268

TABLE VI-8. PER CAPITA PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1974-1982 (cont.)

(In dollars)

County	1974	1975	1976	1977	1978	1979	1980	1981	1982
Manistee	4,022	4,510	4,937	5,621	6,231	6,858	7,430	8,240	8,426
Marquette	4,396	5,001	5,474	5,779	6,629	7,273	7,807	8,527	8,595
Mason	4,251	4,431	4,824	5,334	6,029	6,675	7,024	7,797	7,860
Mecosta	3,029	3,331	3,552	3,915	4,401	4,790	5,474	5,767	6,030
Menominee	4,149	4,409	4,876	5,319	6,041	6,709	7,307	8,090	8,422
Midland	5,830	6,169	6,969	7,701	8,452	9,306	9,904	11,012	11,113
Missaukee	3,614	3,908	4,180	4,421	4,980	5,350	5,884	6,549	6,735
Monroe	5,235	5,509	6,178	6,995	7,690	8,480	9,041	10,024	10,509
Montcalm	4,584	4,716	5,063	5,654	6,250	6,648	7,590	8,361	8,616
Montmorency	3,519	3,892	4,299	4,882	5,472	6,031	6,711	7,210	7,876
Muskegon	4,861	5,210	5,665	6,228	7,012	7,789	8,353	9,091	9,442
Newaygo	3,921	4,188	4,590	4,967	5,604	6,132	6,472	7,128	7,479
Oakland	7,298	7,695	8,667	9,891	11,127	12,268	12,879	13,855	14,186
Oceana	4,066	4,048	4,373	4,985	5,700	6,130	6,560	7,287	7,456
Ogemaw	3,550	3,800	4,261	4,744	4,971	5,573	5,992	6,487	6,772
Ontonagon	4,061	4,449	4,309	4,649	4,926	5,581	6,345	7,173	7,273
Osceola	3,895	4,086	4,055	4,510	4,965	5,526	6,213	6,658	7,017
Oscoda	3,217	3,517	3,924	4,197	4,303	4,623	4,920	5,304	5,587
Otsego	4,055	4,769	5,374	6,050	6,745	7,503	7,948	8,581	8,605
Ottawa	5,179	5,385	5,980	6,820	7,699	8,632	8,906	9,800	10,218
Presque Isle	3,718	4,093	4,400	4,866	5,413	5,912	6,605	7,338	7,572
Roscommon	3,697	4,094	4,519	4,995	5,474	5,983	6,748	7,473	7,812
Saginaw	5,413	5,735	6,685	7,555	8,305	9,101	9,570	10,380	10,416
St. Clair	4,907	5,215	5,823	6,545	7,330	7,896	8,427	9,177	9,574
St. Joseph	4,809	5,259	5,761	6,361	7,016	7,788	8,266	9,090	9,418

TABLE VI-8. PER CAPITA PERSONAL INCOME IN MICHIGAN COUNTIES AND STANDARD METROPOLITAN STATISTICAL AREAS: 1974-1982 (cont.)

(In dollars)

County	1974	1975	1976	1977	1978	1979	1980	1981	1982
Sanilac	4,634	4,591	5,006	5,637	6,255	6,984	7,551	8,332	8,637
Schoolcraft	3,792	4,306	4,572	5,036	5,490	6,321	7,050	7,606	8,328
Shiawassee	5,086	5,404	5,985	6,751	7,584	8,373	8,994	9,854	10,016
Tuscola	5,144	5,072	5,659	6,410	6,997	7,837	8,428	9,139	9,329
Van Buren	4,599	4,700	5,168	5,762	6,534	7,114	7,605	8,409	8,655
Washtenaw	5,485	6,110	6,895	7,745	8,745	9,698	10,430	11,239	11,627
Wayne	6,213	6,427	7,264	8,161	9,141	10,012	10,674	11,205	11,558
Wexford	4,136	4,405	4,933	5,538	5,983	6,553	7,098	7,741	8,304
Michigan	5,680	5,988	6,726	7,567	8,452	9,297	9,872	10,653	10,942
U.S.	5,448	5,842	6,367	6,984	7,776	8,657	9,503	10,582	11,107
Standard Metropolitan Statistical Areas									
Ann Arbor	5,485	6,110	6,895	7,745	8,745	9,698	10,430	11,239	11,627
Battle Creek	5,470	6,034	6,713	7,312	8,049	8,946	9,567	10,409	10,667
Benton Harbor	5,418	5,567	5,907	6,636	7,395	7,942	8,501	9,416	9,786
Detroit	6,338	6,609	7,482	8,475	9,503	10,431	11,020	11,752	12,092
Flint	5,432	5,898	7,066	8,114	8,851	9,647	10,114	11,252	11,107
Grand Rapids	5,467	5,708	6,293	7,042	7,982	8,956	9,436	10,316	10,684
Jackson	5,397	5,739	6,154	6,764	7,565	8,332	8,818	9,668	9,850
Kalamazoo-Portage	5,592	6,062	6,656	7,398	8,222	9,163	9,893	10,849	11,170
Lansing-East Lansing	5,227	5,754	6,504	7,311	8,055	8,953	9,545	10,509	10,871
Muskegon-Muskegon Hgts-Norton Shores	4,861	5,210	5,665	6,228	7,012	7,789	8,353	9,091	9,442
Saginaw	5,383	5,709	6,564	7,388	8,090	8,893	9,461	10,333	10,422

SOURCE: Bureau of Economic Analysis, Regional Economics Information System, special release.

TABLE VI-9. PERCENTAGE CHANGE IN PER CAPITA PERSONAL INCOME, 1972-1982 AND 1981-1982, AND RANKING OF MICHIGAN COUNTIES ACCORDING TO PER CAPITA PERSONAL INCOME: 1982

County	Per capita personal income	Percent change 1972-1982	Percent change 1981-1982	County	Per capita personal income	Percent change 1972-1982	Percent change 1981-1982
Oakland	14,186	128.0	2.4	Marquette	8,595	140.6	0.8
Macomb	12,268	133.9	2.3	Alpena	8,557	135.7	0.8
Washtenaw	11,627	141.3	3.5	Delta	8,546	149.4	4.5
Wayne	11,558	123.7	3.2	Antrim	8,512	148.7	2.4
Ingham	11,321	141.1	4.2	Allegan	8,447	133.2	3.3
Kalamazoo	11,170	146.6	3.0	Manistee	8,426	143.4	2.3
Midland	11,113	131.5	0.9	Menominee	8,422	162.9	4.1
Genesee	11,107	128.8	-1.3	Schoolcraft	8,328	171.3	9.5
Kent	10,849	132.9	3.3	Barry	8,318	120.9	2.4
Calhoun	10,667	127.5	2.5	Wexford	8,304	151.9	7.3
Grand Traverse	10,621	151.9	6.8	Gogebic	8,267	140.2	5.4
Monroe	10,509	139.1	4.8	Benzie	8,227	124.8	6.3
Saginaw	10,416	125.7	0.3	Iosco	8,192	124.7	5.4
Ottawa	10,218	129.7	4.3	Cheboygan	7,913	136.7	3.1
Dickinson	10,156	161.1	5.7	Ionia	7,913	135.9	1.0
Eaton	10,061	124.8	2.1	Montmorency	7,876	141.2	9.2
Luce	10,033	225.7	8.9	Mason	7,860	113.8	0.8
Shiawassee	10,016	131.2	1.6	Kalkaska	7,812	150.9	4.4
Bay	10,001	142.2	1.8	Roscommon	7,812	132.8	4.5
Clinton	9,950	125.0	1.5	Isabella	7,704	153.8	5.6
Jackson	9,850	116.1	1.9	Keweenaw	7,650	148.5	-0.9
Berrien	9,786	112.6	3.9	Presque Isle	7,572	151.3	3.2
Huron	9,672	157.2	4.8	Arenac	7,496	129.0	2.0
Lenawee	9,660	121.1	2.0	Newaygo	7,479	110.9	4.9
St. Clair	9,574	130.6	4.3	Oceana	7,456	127.8	2.3
Gratiot	9,568	128.9	4.0	Alcona	7,390	155.1	7.3
Livingston	9,551	120.9	2.2	Houghton	7,376	155.3	3.9
Cass	9,464	118.5	6.3	Clare	7,367	134.4	5.4
Muskegon	9,442	136.5	3.9	Crawford	7,341	139.9	8.4
St. Joseph	9,418	121.0	3.6	Chippewa	7,279	132.5	4.9
Emmet	9,365	134.4	4.5	Ontonagon	7,273	118.1	1.4
Tuscola	9,329	134.7	2.1	Gladwin	7,154	124.1	4.2
Branch	9,125	149.5	1.4	Baraga	7,142	99.2	-2.6
Lapeer	9,123	120.7	2.7	Osceola	7,017	132.9	5.4
Leelanau	9,066	134.9	3.8	Alger	6,809	129.7	3.9
Mackinac	8,752	169.8	4.8	Ogemaw	6,772	124.8	4.4
Iron	8,749	176.5	4.0	Missaukee	6,735	122.3	2.8
Charlevoix	8,717	138.7	4.4	Lake	6,187	99.5	4.1
Hillsdale	8,659	122.7	3.9	Mecosta	6,030	130.5	4.6
Van Buren	8,655	131.3	2.9	Oscoda	5,587	105.9	5.3
Sanilac	8,637	127.4	3.7				
Montcalm	8,616	138.5	3.0	Michigan	10,942	128.1	2.7
Otsego	8,605	139.0	0.3	United States	11,100	145.8	4.9

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-10. DIVIDENDS, INTEREST, AND RENT PER CAPITA, AND RANKING OF MICHIGAN COUNTIES ACCORDING TO DIVIDENDS, INTEREST, AND RENT AS A PERCENTAGE OF TOTAL PERSONAL INCOME: 1982

County	Percentage	Per capita	County	Percentage	Per capita
Roscommon	30.5	2,385	Menominee	17.7	1,488
Montmorency	29.9	2,356	Tuscola	17.7	1,647
Leelanau	29.5	2,677	Gladwin	17.6	1,263
Oscoda	28.2	1,572	Chippewa	17.6	1,283
Alcona	28.1	2,076	Wexford	17.6	1,460
Huron	26.9	2,600	Branch	17.5	1,597
Antrim	26.0	2,210	St. Joseph	17.4	1,637
Benzie	25.7	2,121	Hillsdale	17.3	1,495
Emmet	25.6	2,396	Mecosta	17.1	1,035
Crawford	25.2	1,851	Barry	17.1	1,424
Sanilac	24.7	2,136	Washtenaw	16.9	1,962
Keweenaw	22.8	1,758	Kalamazoo	16.8	1,880
Missaukee	22.4	1,507	Delta	16.6	1,420
Ogemaw	22.2	1,506	Kent	16.6	1,801
Cheboygan	22.0	1,742	Gratiot	16.5	1,580
Mason	21.8	1,713	Ottawa	16.5	1,688
Otsego	21.8	1,873	Allegan	16.5	1,394
Arenac	21.3	1,595	Isabella	16.5	1,270
Manistee	21.3	1,792	Newaygo	16.3	1,216
Presque Isle	21.2	1,603	Jackson	16.2	1,599
Houghton	21.2	1,562	Saginaw	16.1	1,679
Mackinac	21.1	1,843	Livingston	16.1	1,540
Oakland	20.7	2,935	Van Buren	16.1	1,394
Charlevoix	20.5	1,787	Ontonagon	16.0	1,116
Lake	20.5	1,275	Cass	15.9	1,502
Grand Traverse	19.7	2,099	Ionia	15.7	1,240
Iron	19.6	1,714	Eaton	15.5	1,560
Oceana	19.5	1,450	Macomb	15.4	1,886
Kalkaska	19.0	1,491	Calhoun	15.3	1,628
Iosco	19.0	1,554	Montcalm	15.1	1,303
Gogebic	18.9	1,564	Clinton	15.1	1,501
Berrien	18.6	1,823	Muskegon	14.6	1,375
Osceola	18.6	1,304	Monroe	14.4	1,516
Alger	18.4	1,254	Lapeer	14.4	1,310
Clare	18.4	1,354	Shiawassee	14.1	1,411
Midland	18.1	2,011	Ingham	14.1	1,593
Dickinson	18.1	1,834	Wayne	13.8	1,596
Schoolcraft	18.0	1,508	Genesee	13.7	1,524
Bay	18.0	1,799	Marquette	13.7	1,175
Alpena	17.9	1,534	Luce	12.4	1,238
Baraga	17.9	1,277			
Lenawee	17.8	1,722	Michigan	16.4	1,792
St. Clair	17.7	1,693	United States	18.8	2,082

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-11. GROWTH IN TOTAL PERSONAL INCOME, 1972-1982, AND RANKING OF MICHIGAN COUNTIES ACCORDING TO GROWTH IN TOTAL PERSONAL INCOME: 981-1982

	Percentage change	
County	1972-1982	1981-1982
Schoolcraft	176	10
Crawford	232	9
Wexford	208	8
Roscommon	254	8
Iosco	139	8
Grand Traverse	234	8
Montmorency	216	7
Osceola	174	7
Lake	151	7
Alcona	208	7
Newaygo	159	6
Clare	212	6
Dickinson	173	6
Kalkaska	369	6
Gogebic	126	6
Isabella	179	6
Delta	165	6
Missaukee	204	5
Oscoda	179	5
Emmet	177	5
Leelanau	189	5
Ottawa	180	5
Gladwin	208	5
Mackinac	168	5
Luce	169	5
Ogemaw	198	5
Chippewa	96	5
Huron	164	5
Benzie	181	5
Allegan	174	5
St. Joseph	154	4
Kent	154	4
Mecosta	176	4
Cass	141	4
Iron	173	4
Antrim	202	4
St. Clair	150	4
Keweenaw	128	4
Houghton	164	4
Arenac	184	4
Montcalm	177	4
Monroe	155	4
Kalamazoo	160	4
Van Buren	155	3
Cheboygan	176	3
Hillsdale	137	3
Muskegon	133	3
Menominee	174	3
Ingham	147	3
Alger	154	3
Charlevoix	175	3
Washtenaw	161	3
Barry	152	3
Ontonagon	104	3
Presque Isle	164	3
Lapeer	179	3
Gratiot	126	3
Sanilac	146	2
Eaton	174	2
Calhoun	124	2
Livingston	247	2
Oakland	148	2
Macomb	153	2
Berrien	109	2
Oceana	156	2
Jackson	122	1
Clinton	155	1
Lenawee	133	1
Ionia	155	1
Mason	131	1
Midland	162	1
Bay	140	1
Branch	146	1
Wayne	89	1
Tuscola	158	1
Manistee	156	1
Otsego	216	0
Shiawassee	145	0
Marquette	157	0
Alpena	138	0
Saginaw	125	-1
Genesee	124	-3
Baraga	116	-3
Michigan	130	2
United States	172	6

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-12. GROWTH IN LABOR AND PROPRIETORS' EARNINGS, BY COUNTY IN WHICH EARNED, 1972-1982, AND RANKING OF MICHIGAN COUNTIES ACCORDING TO GROWTH IN LABOR AND PROPRIETORS' EARNINGS, BY COUNTY IN WHICH EARNED: 1981-1982

	Percentage change			Percentage change	
County	1972-1982	1981-1982	County	1972-1982	1981-1982
Crawford	165	13	Alcona	98	-1
Lake	42	10	Gladwin	117	-1
Grand Traverse	208	8	Muskegon	101	-1
Montmorency	53	7	Gratiot	91	-1
Schoolcraft	137	7	Cheboygan	118	-1
Iosco	84	7	Hillsdale	100	-1
Wexford	167	7	Benzie	109	-1
Newaygo	103	7	Ogemaw	132	-1
Clare	120	6	Missaukee	124	-1
Monroe	135	6	Leelanau	87	-2
Osceola	113	5	Wayne	65	-2
St. Clair	128	5	Calhoun	90	-2
Midland	154	4	Van Buren	104	-2
Ottawa	157	4	Berrien	68	-3
Gogebic	78	4	Charlevoix	130	-3
Lapeer	120	4	Macomb	97	-3
Iron	114	3	Bay	106	-3
Luce	139	3	Menominee	123	-3
Allegan	130	3	Barry	98	-3
Dickinson	132	3	Clinton	120	-3
Livingston	172	3	Jackson	89	-3
Emmet	118	2	Lenawee	64	-3
Kent	141	2	Sanilac	71	-4
Kalamazoo	147	2	Branch	109	-4
Arenac	121	2	Presque Isle	106	-4
Huron	104	1	Oceana	124	-4
Isabella	170	1	Shiawassee	80	-4
Delta	131	1	Montcalm	128	-5
Kalkaska	504	1	Keweenaw	-9	-5
Chippewa	39	1	Antrim	102	-6
Ingham	139	1	Mason	60	-6
Houghton	127	1	Ionia	108	-6
Mackinac	114	0	Marquette	123	-7
Cass	94	0	Saginaw	93	-7
Alger	101	0	Otsego	183	-7
Mecosta	125	0	Genesee	103	-8
Tuscola	113	0	Alpena	85	-8
Roscommon	135	0	Ontonagon	39	-8
St. Joseph	108	0	Manistee	103	-9
Eaton	113	0	Baraga	54	-10
Oscoda	82	0			
Oakland	155	0	Michigan	101	-1
Washtenaw	162	0	United States	144	4

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-13. EARNINGS RESIDENCE ADJUSTMENT FOR MICHIGAN COUNTIES: 1982

(Dollar figures in thousands)

County	Labor and proprietors' earnings, by county in which earned	Residence adjustment	Labor and proprietors' earnings, by county in which received	(a) Proportion
Eaton	210,695	433,969	644,664	0.6732
Clinton	142,719	262,986	405,705	0.6482
Livingston	289,876	405,133	695,009	0.5829
Keweenaw	2,927	3,074	6,001	0.5122
Leelanau	33,281	34,632	67,913	0.5099
Shiawassee	240,621	231,616	472,237	0.4905
Cass	163,976	149,099	313,075	0.4762
Barry	135,365	120,986	256,351	0.4720
Lapeer	236,905	197,073	433,978	0.4541
Gladwin	44,835	33,294	78,129	0.4261
Monroe	583,320	402,746	986,066	0.4084
Oceana	57,199	33,913	91,112	0.3722
Lake	13,261	7,715	20,976	0.3678
Tuscola	217,353	119,585	336,938	0.3549
Allegan	307,527	167,779	475,306	0.3530
Arenac	38,279	19,089	57,368	0.3327
Newaygo	107,981	53,664	161,645	0.3320
Van Buren	242,896	117,369	360,265	0.3258
Clare	63,256	29,672	92,928	0.3193
Alcona	16,895	7,906	24,801	0.3188
Macomb	4,322,815	1,861,070	6,183,885	0.3010
Ionia	185,591	78,127	263,718	0.2963
Missaukee	25,490	10,452	35,942	0.2908
Antrim	53,625	16,235	69,860	0.2324
St. Clair	671,205	175,034	846,239	0.2068
Lenawee	449,754	111,241	560,995	0.1983
Gogebic	64,156	15,758	79,914	0.1972
Sanilac	149,764	36,528	186,292	0.1961
Menominee	108,688	25,771	134,459	0.1917
Hillsdale	183,477	41,180	224,657	0.1833
Ottawa	952,680	213,263	1,165,943	0.1829
Bay	634,082	140,476	774,558	0.1814
Benzie	37,784	6,759	44,543	0.1517
Montmorency	15,739	2,569	18,308	0.1403
Montcalm	224,375	36,404	260,779	0.1396

TABLE VI-13. EARNINGS RESIDENCE ADJUSTMENT FOR MICHIGAN COUNTIES: 1982 (cont.)

(Dollar figures in thousands)

County	Labor and proprietors' earnings, by county in which earned	Residence adjustment	Labor and proprietors' earnings, by county in which received	(a) Proportion
Iron	51,392	8,132	59,524	0.1366
Gratiot	216,798	33,689	250,487	0.1345
Oscoda	12,527	1,598	14,125	0.1131
St. Joseph	317,819	35,058	352,877	0.0993
Oakland	8,872,722	892,689	9,765,411	0.0914
Mecosta	120,181	11,847	132,028	0.0897
Alger	30,384	2,839	33,223	0.0855
Branch	210,039	17,330	227,369	0.0762
Baraga	29,422	1,813	31,235	0.0580
Charlevoix	92,694	5,158	97,852	0.0527
Cheboygan	81,346	4,328	85,674	0.0505
Huron	177,954	7,945	185,899	0.0427
Jackson	951,449	37,986	989,435	0.0384
Isabella	265,625	9,778	275,403	0.0355
Mackinac	45,967	1,324	47,291	0.0280
Osceola	74,047	1,872	75,919	0.0247
Ogemaw	50,297	1,115	51,412	0.0217
Chippewa	109,833	2,313	112,146	0.0206
Manistee	99,425	1,924	101,349	0.0190
Houghton	141,428	2,473	143,901	0.0172
Kalkaska	50,791	766	51,557	0.0149
Presque Isle	54,125	296	54,421	0.0054
Schoolcraft	37,710	-65	37,645	-0.0017
Berrien	1,022,201	-1,984	1,020,217	-0.0019
Mason	116,400	-1,380	115,020	-0.0119
Alpena	161,031	-2,381	158,650	-0.0148
Delta	203,667	-3,369	200,298	-0.0165
Marquette	424,375	-7,346	417,029	-0.0173
Iosco	136,436	-2,902	133,534	-0.0213
Muskegon	993,386	-22,453	970,933	-0.0226
Roscommon	43,698	-1,169	42,529	-0.0268
Dickinson	159,700	-4,868	154,832	-0.0305
Crawford	35,163	-1,344	33,819	-0.0382
Calhoun	1,027,773	-46,795	980,978	-0.0455
Saginaw	1,698,615	-125,023	1,573,592	-0.0736

TABLE VI-13. EARNINGS RESIDENCE ADJUSTMENT FOR MICHIGAN COUNTIES: 1982 (cont.)

(Dollar figures in thousands)

County	Labor and proprietors' earnings, by county in which earned	Residence adjustment	Labor and proprietors' earnings, by county in which received	(a) Proportion
Emmet	127,203	-10,730	116,473	-0.0844
Otsego	82,924	-7,634	75,290	-0.0921
Luce	41,719	-3,867	37,852	-0.0927
Kalamazoo	1,862,571	-180,296	1,682,275	-0.0968
Genesee	3,839,538	-392,370	3,447,168	-0.1022
Wexford	141,753	-15,718	126,035	-0.1109
Kent	3,903,223	-473,303	3,429,920	-0.1213
Grand Traverse	440,489	-56,480	384,009	-0.1282
Wayne	20,619,615	-3,103,758	17,515,857	-0.1505
Midland	714,632	-129,321	585,311	-0.1810
Washtenaw	2,816,805	-661,714	2,155,091	-0.2349
Ingham	3,130,184	-914,936	2,215,248	-0.2923
Ontonagon	60,848	-21,115	39,733	-0.3470
Michigan	67,126,317	492,119	67,618,436	0.0073
United States	1,715,119,008	-559,008	1,714,560,000	-0.0003

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a. Residence Adjustment as percentage of labor and proprietors's earnings received (where positive) or generated (where negative).

TABLE VI-14. RANKING OF MICHIGAN COUNTIES ACCORDING TO NONFARM PROPRIETORS' EARNINGS AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

	Percentage	
County	1981	1982
Alcona	22.38	21.90
Montmorency	22.57	20.52
Lake	21.78	19.36
Keweenaw	18.19	18.72
Oscoda	18.82	18.36
Leelanau	14.94	14.92
Mackinac	14.62	14.18
Alger	14.25	13.84
Roscommon	13.63	13.23
Gladwin	13.23	12.97
Clare	13.42	12.31
Missaukee	12.19	12.04
Cheboygan	11.18	10.99
Ogemaw	10.70	10.57
Iron	11.19	10.54
Baraga	9.50	10.33
Benzie	10.35	10.22
Gogebic	10.66	9.98
Chippewa	10.17	9.82
Oceana	9.53	9.71
Crawford	11.15	9.70
Otsego	8.87	9.36
Arenac	9.68	9.23
Antrim	8.71	9.05
Livingston	9.50	9.01
Schoolcraft	9.67	8.75
Eaton	8.86	8.63
Newaygo	9.36	8.55
Barry	8.49	8.53
Presque Isle	8.29	8.43
Clinton	8.07	8.11
Sanilac	7.89	7.97
Charlevoix	7.85	7.88
Osceola	8.44	7.82
Wexford	8.54	7.76
Oakland	7.73	7.55
Huron	7.79	7.49
Tuscola	7.56	7.35
Shiawassee	7.17	7.29
Cass	7.44	7.24
Emmet	7.52	7.16
Manistee	6.64	7.09
Mecosta	6.91	6.71
Hillsdale	6.81	6.70
Mason	6.47	6.70
Ionia	6.34	6.59
Menominee	6.53	6.55
Van Buren	6.51	6.49
Houghton	6.64	6.43
Delta	6.66	6.40
Montcalm	6.17	6.31
Allegan	6.67	6.30
Lapeer	6.67	6.26
Kalkaska	6.40	6.25
Isabella	6.32	6.08
Ottawa	6.46	6.06
Alpena	5.72	6.04
Dickinson	6.30	5.97
Bay	5.92	5.93
Iosco	6.42	5.82
St. Clair	6.26	5.80
Lenawee	5.70	5.75
Branch	5.63	5.69
Monroe	6.14	5.66
Berrien	5.62	5.61
Gratiot	5.41	5.31
Luce	5.60	5.29
Grand Traverse	5.71	5.18
St. Joseph	4.98	4.85
Macomb	4.85	4.85
Kent	5.01	4.76
Muskegon	4.60	4.51
Jackson	4.29	4.31
Saginaw	3.88	4.07
Marquette	3.75	3.93
Ontonagon	3.62	3.82
Calhoun	3.81	3.80
Kalamazoo	3.85	3.67
Ingham	2.96	2.86
Washtenaw	2.92	2.85
Genesee	2.70	2.84
Wayne	2.65	2.64
Midland	2.62	2.44
Michigan	4.52	4.47
United States	5.13	4.79

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VI-15. SIZE DISTRIBUTION OF INCOME AMONG HOUSEHOLDS, FAMILIES AND UNRELATED INDIVIDUALS IN MICHIGAN AND THE UNITED STATES: CENSUS 1980 (1979 INCOME DATA)

	Michigan	United States[a]
Households	3,199,830	80,433,749
Less than $5,000	365,237	10,602,495
$5,000 to $7,499	236,036	6,427,456
$7,500 to $9,999	217,482	6,391,051
$10,000 to $14,999	417,778	12,352,784
$15,000 to $19,999	428,479	11,378,390
$20,000 to $24,999	418,102	9,972,264
$25,000 to $34,999	587,138	12,712,171
$35,000 to $49,999	360,249	6,908,694
$50,000 or more	169,329	3,688,444
Median	$ 19,223	$ 16,830
Mean	$ 22,070	$ 20,373
Families	2,404,910	58,975,810
Less than $5,000	146,441	4,297,235
$5,000 to $7,499	138,185	3,652,477
$7,500 to $9,999	141,071	4,112,637
$10,000 to $14,999	291,253	8,651,779
$15,000 to $19,999	327,636	8,930,918
$20,000 to $24,999	523,597	8,413,980
$25,000 to $34,999	523,597	11,325,422
$35,000 to $49,999	332,256	6,260,836
$50,000 or more	156,374	3,330,526
Median	$ 22,107	$ 19,908
Mean	$ 24,921	$ 23,177
Unrelated individuals 15 years and over	1,126,768	30,340,160
Less than $2,000	144,151	4,302,204
$2,000 to $2,999	90,724	2,572,178
$3,000 to $4,999	204,726	5,229,252
$5,000 to $7,999	174,412	5,069,986
$8,000 to $9,999	86,482	2,605,308
$10,000 to $14,999	168,996	4,836,299
$15,000 to $24,999	193,538	4,207,544
$25,000 to $49,999	57,316	1,284,547
$50,000 or more	6,423	232,842
Median	$ 6,979	$ 6,714
Mean	$ 9,765	$ 9,317

SOURCE: Bureau of the Census 1980 Census of Population, General Social and Economic Characteristics, Michigan (Washington, D.C.: 1983), PC80-1-C24, Table 71; and 1980 Census of Population and Housing, Supplementary Report, Provisional Estimates of Social, Economic and Housing Characteristics, States and Selected Standard Metropolitan Areas (Washington, D.C.: 1982), PHC80-S1-1, Table P-4.

a. Preliminary

TABLE VI-16. SIZE DISTRIBUTION OF INCOME AMONG HOUSEHOLDS, FAMILIES AND UNRELEATED INDIVIDUALS IN MICHIGAN BY RACE AND FOR PERSONS OF SPANISH ORIGIN: CENSUS 1980 (1979 INCOME DATA)

	White	Black	American Indian[a]	Asian[b]	Spanish
Households	2,764,635	387,645	13,211	17,044	42,321
Less than $5,000	273,622	84,852	2,098	2,045	6,180
$5,000 to $7,499	191,884	40,056	1,424	1,072	3,530
$7,500 to $9,999	184,202	30,223	1.145	748	2,982
$10,000 to $14,999	360,751	50,811	2,079	1,630	5,752
$15,000 to $19,999	373,069	48,753	2,025	1,786	6,281
$20,000 to $24,999	371,711	40,573	1,607	1,801	5,762
$25,000 to $34,999	529,290	50,508	1,802	3,078	6,679
$35,000 to $49,999	324,093	31,571	770	2,497	3,666
$50,000 or more	156,018	10,298	261	2,387	1,489
Median	$ 19,983	$ 13,695	$ 14,605	$ 23,241	$ 17,120
Mean	$ 22,801	$ 16,896	$ 16,840	$ 29,496	$ 19,520
Families	2,088,071	279,680	10,215	12,872	33,710
Less than $5,000	97,250	45,170	1,255	1,018	3,702
$5,000 to $7,499	105,572	29,668	1,029	593	2,698
$7,500 to $9,999	116,892	21,956	875	475	2,196
$10,000 to $14,999	249,455	37,176	1,581	1,045	4,466
$15,000 to $19,999	287,321	35,044	1,627	1,252	5,276
$20,000 to $24,999	312,395	30,895	1,345	1,397	4,887
$25,000 to $34,999	474,867	42,424	1,566	2,586	5,867
$35,000 to $49,999	299,680	28,381	701	2,275	3,313
$50,000 or more	144,639	8,966	236	2,231	1,305
Median	$ 22,841	$ 15,817	$ 15,961	$ 27,408	$ 18,592
Mean	$ 25,768	$ 18,734	$ 18,187	$ 33,867	$ 20,886
Unrelated individuals 15 years and over	952,418	154,290	5,357	8,321	15,108
Less than $2,000	112,013	27,125	1,041	2,450	3,112
$2,000 to $2,999	71,091	17,882	515	614	1,521
$3,000 to $4,999	174,250	27,676	993	933	2,298
$5,000 to $7,999	152,705	18,851	815	1,200	1,875
$8,000 to $9,999	75,597	9,606	433	406	1,062
$10,000 to $14,999	147,589	18,845	735	905	2,154
$15,000 to $24,999	163,015	27,737	636	1,215	2,334
$25,000 to $49,999	50,219	6,194	167	515	690
$50,000 or more	5,939	374	22	83	62
Median	$ 7,209	$ 5,638	$ 5,342	$ 5,412	$ 5,771
Mean	$ 9,971	$ 8,687	$ 7,771	$ 8,752	$ 8,777

SOURCE: Bureau of the Census, 1980 Census of Population, General Social and Economic Characteristics, Michigan (Washington, D.C.: 1983), Tables 81 and 91.

a. Includes Eskimo and Aleut.

b. Includes Pacific Islanders.

TABLE VI-17. SIZE DISTRIBUTION AND MEDIAN INCOME OF FAMILIES AND UNRELATED INDIVIDUALS IN MICHIGAN, FOR WHITE, BLACK AND PERSONS OF SPANISH LANGUAGE: CENSUS 1970 (1969 INCOME DATA)

	Total	White		Black
		Total	Spanish	
Families				
Less than $1,000	39,455	28,081	593	11,137
$1,000 to $1,999	52,277	40,983	500	11,023
$2,000 to $2,999	71,822	58,340	660	13,073
$3,000 to $3,999	76,568	63,915	822	12,202
$4,000 to $4,999	79,918	67,711	1,039	11,771
$5,000 to $5,999	88,709	76,057	1,210	12,150
$6,000 to $6,999	101,392	87,084	1,465	13,821
$7,000 to $7,999	125,745	109,013	2,203	16,177
$8,000 to $8,999	149,195	131,460	2,298	17,183
$9,000 to $9,999	152,679	136,856	2,176	15,265
$10,000 to $11,999	305,128	278,398	3,570	25,774
$12,000 to $14,999	363,177	334,627	3,810	27,444
$15,000 to $24,999	467,648	437,443	3,960	28,814
$25,000 to $49,999	98,841	94,703	681	3,676
$50,000 or more	17,715	17,198	149	432
Total	2,190,269	1,961,869	25,136	219,942
Median	$ 11,032	$ 11,303	$ 9,817	$ 8,501
Unrelated individuals				
Less than $1,000	142,089	120,110	1,200	20,354
$1,000 to $1,999	155,341	137,151	903	17,146
$2,000 to $2,999	84,698	75,651	556	8,517
$3,000 to $3,999	58,974	51,240	429	7,153
$4,000 to $4,999	43,192	37,361	368	5,557
$5,000 to $5,999	38,760	33,267	318	5,272
$6,000 to $6,999	35,517	29,730	312	5,615
$7,000 to $7,999	35,606	28,846	331	6,461
$8,000 to $8,999	28,969	23,552	210	5,287
$9,000 to $9,999	20,151	17,014	195	2,978
$10,000 to $11,999	26,296	23,269	96	2,888
$12,000 to $14,999	18,228	16,787	91	1,346
$15,000 to $24,999	12,629	12,034	118	546
$25,000 to $49,999	3,012	2,868	7	106
$50,000 or more	926	860	10	61
Total	704,388	609,740	5,144	89,287
Median	$ 2,647	$ 2,629	$ 2,844	$ 2,839

SOURCE: Bureau of the Census, 1970 Census of Population, General Social and Economic Characteristics, Michigan (Washington, D.C.: 1972), Table 57.

TABLE VI-18. INCIDENCE OF POVERTY IN MICHIGAN, TOTAL POPULATION, PERSONS 65 YEARS OLD AND OLDER, AND PERSONS 17 YEARS OLD AND UNDER, BY COUNTY: CENSUS 1980

County	Population in poverty		Persons 65 and over in poverty		Persons 18 and under in poverty	
	Number	Percentage	Number	Percentage	Number	Percentage
Alcona	1,586	16.2	329	17.0	537	21.5
Alger	1,161	12.5	193	16.9	381	13.8
Allegan	6,795	8.3	1,127	14.1	2,516	9.7
Alpena	3,360	10.3	678	18.6	1,134	11.5
Antrim	1,743	10.7	391	16.8	527	11.3
Arenac	2,231	15.1	362	18.2	816	18.4
Baraga	990	11.6	236	19.3	277	10.6
Barry	3,925	8.5	452	10.2	1,436	10.1
Bay	11,096	9.2	1,655	14.2	4,129	11.3
Benzie	1,359	12.1	219	13.7	470	14.8
Berrien	22,683	13.2	2,393	13.4	10,177	19.6
Branch	4,166	10.3	553	12.3	1,658	14.0
Calhoun	14,618	10.3	1,667	11.2	5,805	14.3
Cass	5,417	10.9	741	14.2	1,973	13.1
Charlevoix	2,187	10.9	416	17.6	741	12.5
Cheboygan	3,034	14.6	491	17.4	1,150	18.4
Chippewa	3,967	13.6	644	18.8	1,377	17.4
Clare	3,766	15.8	439	12.5	1,453	21.3
Clinton	3,180	5.6	498	12.1	1,074	5.6
Crawford	1,290	13.6	228	19.3	434	15.5
Delta	4,464	11.4	840	18.0	1,567	12.8
Dickinson	2,195	8.6	739	18.1	565	8.3
Eaton	5,130	5.8	713	10.8	1,721	6.2
Emmet	2,289	9.9	491	18.6	710	10.7
Genesee	47,352	10.5	3,894	11.4	20,444	14.3

TABLE VI-18. INCIDENCE OF POVERTY IN MICHIGAN, TOTAL POPULATION, PERSONS 65 YEARS OLD AND OLDER, AND PERSONS 17 YEARS OLD AND UNDER, BY COUNTY: CENSUS 1980 (cont.)

	Population in poverty		Persons 65 and over in poverty		Persons 18 and under in poverty	
County	Number	Percentage	Number	Percentage	Number	Percentage
Gladwin	2,918	14.6	411	14.7	1,098	19.0
Gogebic	2,308	11.7	621	16.2	694	14.5
Grand Traverse	4,366	7.9	750	14.1	1,301	8.3
Gratiot	4,520	11.1	687	16.6	1,656	13.3
Hillsdale	4,406	10.4	726	14.7	1,542	12.3
Houghton	5,816	15.3	872	15.3	1,214	14.0
Huron	4,469	12.2	845	16.1	1,595	14.6
Ingham	33,659	12.2	1,924	9.9	9,332	13.2
Ionia	4,425	8.5	653	13.7	1,609	9.9
Iosco	3,216	11.3	474	12.9	1,171	14.5
Iron	1,592	11.6	425	15.4	473	14.8
Isabella	8,864	16.3	596	16.2	1,895	14.3
Jackson	13,367	8.8	1,504	10.5	5,105	11.7
Kalamazoo	21,528	10.1	1,675	9.5	6,669	12.0
Kalkaska	1,564	14.2	256	20.2	617	17.5
Kent	37,852	8.5	4,604	11.0	14,320	11.0
Keweenaw	259	13.1	110	20.2	56	13.6
Lake	1,870	24.2	327	20.1	668	32.0
Lapeer	4,886	6.9	497	10.8	1,916	7.7
Leelanau	1,149	8.2	298	16.6	325	8.1
Lenawee	7,416	8.2	1,072	12.3	2,762	10.0
Livingston	4,753	4.7	621	9.2	1,810	5.3
Luce	773	11.6	118	15.0	264	14.0
Mackinac	1,314	12.9	209	14.1	506	16.8
Macomb	31,834	4.5	4,262	8.3	11,444	5.5

TABLE VI-18. INCIDENCE OF POVERTY IN MICHIGAN, TOTAL POPULATION, PERSONS 65 YEARS OLD AND OLDER, AND PERSONS 17 YEARS OLD AND UNDER, BY COUNTY: CENSUS 1980 (cont.)

County	Population in poverty		Persons 65 and over in poverty		Persons 18 and under in poverty	
	Number	Percentage	Number	Percentage	Number	Percentage
Manistee	2,443	10.6	530	15.5	742	11.7
Marquette	6,754	9.1	857	13.9	2,097	10.2
Mason	3,126	11.8	686	18.5	1,042	14.3
Mecosta	5,743	15.5	446	13.6	1,339	16.6
Menominee	2,525	9.6	605	17.3	725	9.3
Midland	5,752	7.8	667	13.6	2,033	8.6
Missaukee	1,428	14.2	244	19.5	527	16.5
Monroe	9,680	7.1	1,396	12.9	3,781	8.5
Montcalm	5,636	11.8	882	15.7	2,010	13.6
Montmorency	1,508	20.1	296	22.2	475	23.7
Muskegon	19,011	12.0	1,479	9.3	8,583	17.9
Newaygo	4,713	13.4	745	17.1	1,829	16.8
Oakland	53,233	5.2	6,359	7.4	19,307	6.7
Oceana	2,883	13.1	449	17.3	1,095	15.5
Ogemaw	2,972	18.0	465	19.3	974	20.5
Ontonagon	1,227	12.4	235	15.9	436	14.7
Osceola	2,640	13.9	441	18.2	1,020	17.2
Oscoda	1,033	15.0	173	15.5	362	19.3
Otsego	1,370	9.1	196	13.1	553	11.3
Ottawa	9,275	5.9	1,210	9.6	3,095	6.2
Presque Isle	2,326	16.3	470	22.4	739	17.5
Roscommon	2,090	12.7	452	14.4	537	13.9
Saginaw	26,241	11.5	2,411	12.3	11,658	15.9
St. Clair	13,335	9.6	1,716	12.0	5,196	11.8
St. Joseph	5,366	9.5	648	10.1	2,262	13.3

TABLE VI-18. INCIDENCE OF POVERTY IN MICHIGAN, TOTAL POPULATION, PERSONS 65 YEARS OLD AND OLDER, AND PERSONS 17 YEARS OLD AND UNDER, BY COUNTY: CENSUS 1980 (cont.)

County	Population in poverty		Persons 65 and over in poverty		Persons 18 and under in poverty	
	Number	Percentage	Number	Percentage	Number	Percentage
Sanilac	4,679	11.4	796	14.5	1,680	13.4
Schoolcraft	1,163	13.5	182	14.5	422	16.9
Shiawassee	5,580	7.8	755	12.7	2,232	9.4
Tuscola	5,419	9.5	836	16.1	1,988	10.6
Van Buren	8,915	13.3	1,200	15.5	3,709	17.9
Washtenaw	26,804	10.1	1,358	8.7	5,870	9.3
Wayne	328,809	14.0	30,171	13.0	138,682	20.5
Wexford	3,087	12.2	456	14.7	1,178	15.5
TOTAL	945,874	10.2	104,738	12.1	361,353	13.3

SOURCE: Bureau of the Census, 1980 Population and Housing, STF3, computer tape.

Note: Income data pertain to the year 1979.

TABLE VI-19. PERCENTAGE OF MICHIGAN PERSONS LIVING IN HOUSEHOLDS WITH INCOME BELOW THE POVERTY LEVEL, BY COUNTY: CENSUS 1970 AND 1980

	Percentage[a]			Percentage[a]	
County	1970	1980	County	1970	1980
Alcona	25.4	16.5	Lake	34.1	24.3
Alger	17.4	12.9	Lapeer	10.3	7.1
Allegan	14.6	8.5	Leelanau	11.8	8.3
Alpena	16.1	10.6	Lenawee	11.2	8.5
Antrim	17.3	10.9	Livingston	7.7	4.8
Arenac	18.2	15.3	Luce	13.0	12.6
Baraga	17.5	12.0	Mackinac	17.8	13.0
Barry	13.4	8.7	Macomb	5.4	4.6
Bay	11.4	9.4	Manistee	19.1	10.7
Benzie	14.0	12.3	Marquette	14.1	9.8
Berrien	14.5	13.5	Mason	14.4	12.1
Branch	15.0	10.7	Mecosta	20.0	18.2
Calhoun	12.4	10.6	Menominee	18.1	9.8
Cass	12.9	11.0	Midland	8.1	8.0
Charlevoix	16.7	11.1	Missaukee	25.1	14.3
Cheboygan	18.9	14.8	Monroe	8.9	7.3
Chippewa	20.2	14.6	Montcalm	16.6	12.0
Clare	21.1	16.0	Montmorency	28.5	20.2
Clinton	7.6	5.7	Muskegon	12.2	12.3
Crawford	17.7	14.0	Newaygo	18.3	13.6
Delta	16.9	11.6	Oakland	6.0	5.3
Dickinson	18.0	8.7	Oceana	22.5	13.3
Eaton	8.3	5.9	Ogemaw	24.5	18.4
Emmet	17.0	10.2	Ontonagon	16.6	12.6
Genesee	9.9	10.6	Osceola	17.9	14.1
Gladwin	15.6	14.7	Oscoda	25.0	15.4
Gogebic	24.1	12.1	Otsego	13.5	9.4
Grand Traverse	11.8	8.3	Ottawa	8.0	6.0
Gratiot	14.0	11.7	Presque Isle	23.3	16.5
Hillsdale	14.6	10.8	Roscommon	22.0	12.9
Houghton	28.6	17.0	Saginaw	11.3	11.7
Huron	18.6	12.4	St. Clair	14.1	9.7
Ingham	11.3	13.2	St. Joseph	13.7	9.7
Ionia	13.5	9.2	Sanilac	19.1	11.6
Iosco	18.2	11.8	Schoolcraft	21.5	13.8
Iron	20.9	11.9	Shiawassee	11.1	7.9
Isabella	20.7	18.9	Tuscola	13.9	9.7
Jackson	11.0	9.3	Van Buren	16.7	13.5
Kalamazoo	10.6	10.7	Washtenaw	10.5	11.0
Kalkaska	27.1	14.4	Wayne	12.3	14.3
Kent	11.1	8.7	Wexford	18.6	12.4
Keweenaw	27.6	13.2	MICHIGAN	9.4	10.4

SOURCE: Bureau of the Census, special release.

a. Based on 1969 and 1979 incomes.

TABLE VI-20. MICHIGAN INCOME AMONG HOUSEHOLDS, FAMILIES AND UNRELATED INDIVIDUALS IN MICHIGAN, BY COUNTY: CENSUS 1980

County	Median household income	Median family income	Median income of unrelated individuals	County	Median household income	Median family income	Median income of unrelated individuals
Alcona	$10,730	$12,301	$ 4,873	Lake	$ 9,134	$11,210	$ 3,998
Alger	14,224	16,354	4,873	Lapeer	21,403	22,984	7,829
Allegan	17,906	20,162	7,291	Leelanau	15,938	17,975	6,898
Alpena	15,166	17,228	4,987	Lenawee	18,537	20,825	6,096
Antrim	14,026	16,174	5,487	Livingston	24,544	26,339	10,091
Arenac	13,184	15,016	5,407	Luce	13,261	15,327	5,481
Baraga	12,007	15,598	4,930	Mackinac	12,454	14,985	5,341
Barry	18,684	20,651	6,776	Macomb	24,222	26,666	10,877
Bay	19,043	22,034	6,572	Manistee	14,351	17,281	5,619
Benzie	13,410	15,435	5,365	Marquette	16,517	19,492	4,718
Berrien	16,274	19,166	6,588	Mason	14,410	16,824	6,020
Branch	16,150	18,535	7,393	Mecosta	13,081	16,023	3,091
Calhoun	17,603	20,789	6,683	Menominee	14,195	16,380	5,372
Cass	16,488	18,548	6,529	Midland	21,527	23,598	6,569
Charlevoix	14,028	16,896	5,610	Missaukee	12,321	13,953	5,242
Cheboygan	13,012	15,203	5,380	Monroe	21,356	23,281	7,889
Chippewa	12,499	14,987	4,110	Montcalm	14,792	16,942	5,771
Clare	11,349	13,231	5,121	Montmorency	10,254	11,995	4,526
Clinton	21,573	23,368	8,505	Muskegon	16,167	18,716	6,669
Crawford	11,832	14,184	5,100	Newaygo	14,082	16,468	5,127
Delta	15,076	17,668	5,223	Oakland	25,325	28,807	11,642
Dickinson	14,293	17,094	5,191	Oceana	14,157	16,334	5,397
Eaton	21,778	24,574	8,957	Ogemaw	10,506	12,270	4,863
Emmet	15,099	18,384	5,881	Ontonagon	13,153	15,984	5,493
Genesee	20,996	23,717	9,078	Osceola	12,970	14,937	5,306
Gladwin	12,255	14,678	5,056	Oscoda	11,175	12,922	5,141
Gogebic	10,973	13,683	4,726	Otsego	15,341	16,941	7,303
Gd. Traverse	16,686	19,325	6,296	Ottawa	20,232	22,059	5,774
Gratiot	15,796	18,334	4,558	Presque Isle	12,491	15,244	4,594
Hillsdale	15,399	17,512	5,032	Roscommon	10,865	12,474	4,683
Houghton	11,456	14,398	3,340	Saginaw	19,726	22,126	7,840
Huron	13,860	16,397	5,946	St. Clair	18,476	21,119	6,887
Ingham	18,090	21,921	4,440	St. Joseph	16,091	18,609	7,493
Ionia	17,439	20,037	6,395	Sanilac	14,590	16,629	5,913
Iosco	11,724	13,649	5,994	Schoolcraft	12,450	14,670	4,643
Iron	11,331	14,532	4,462	Shiawassee	19,722	21,737	7,721
Isabella	15,002	18,318	2,831	Tuscola	18,332	20,583	7,044
Jackson	18,530	21,364	7,104	Van Buren	15,397	17,700	5,963
Kalamazoo	18,634	22,211	5,705	Washtenaw	20,969	25,465	5,331
Kalkaska	13,714	15,691	5,345	Wayne	18,629	22,134	7,774
Kent	18,554	21,530	7,403	Wexford	13,394	15,884	5,705
Keweenaw	9,076	11,705	4,233	MICHIGAN	19,224	22,108	6,979

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF3, computer

NOTE: Income data pertain to the year 1979.

TABLE VI-21. MEDIAN FAMILY INCOME IN MICHIGAN COUNTIES: CENSUS 1970 AND 1980

	Income[a]			Income[a]	
County	1970	1980	County	1970	1980
Alcona	$ 5,842	$12,301	Lake	$ 6,000	$11,210
Alger	8,014	16,354	Lapeer	10,388	22,984
Allegan	9,309	20,162	Leelanau	8,278	17,975
Alpena	8,765	17,228	Lenawee	10,027	20,825
Antrim	8,043	16,174	Livingston	11,551	26,339
Arenac	8,320	15,016	Luce	8,974	15,327
Baraga	8,045	15,598	Mackinac	7,273	14,985
Barry	9,704	20,651	Macomb	13,110	26,666
Bay	10,408	22,034	Manistee	8,365	17,281
Benzie	7,760	15,435	Marquette	8,562	19,492
Barrien	10,056	19,166	Mason	8,476	16,824
Branch	9,325	18,535	Mecosta	7,902	16,023
Calhoun	10,789	20,789	Menominee	7,703	16,380
Cass	9,781	18,548	Midland	11,618	23,598
Charlevoix	8,535	16,896	Missaukee	6,820	13,953
Cheybogan	7,660	15,203	Monroe	11,398	23,281
Chippewa	7,131	14,987	Montcalm	8,526	16,942
Clare	7,547	13,231	Montmorency	5,851	11,995
Clinton	11,014	23,368	Muskegon	9,757	18,716
Crawford	7,930	14,154	Newaygo	8,121	16,468
Delta	8,779	17,668	Oakland	13,826	28.807
Dickinson	8,316	17,094	Oceana	8,000	16,334
Eaton	11,423	24,574	Ogemaw	6,545	12,270
Emmet	8,610	18,384	Ontonagon	8,421	15,984
Genesee	11,255	23,717	Osceola	7,961	14,937
Gladwin	8,157	14,678	Oscoda	6,411	12,922
Gogebic	7,236	13,683	Otsego	9,413	16,941
Grand Traverse	9,542	19,325	Ottawa	10,445	22,059
Gratiot	8,891	18,334	Presque Isle	7,889	15,244
Hillsdale	8,895	17,512	Roscommon	6,895	12,474
Houghton	6,300	14,398	Saginaw	10,878	22,126
Huron	7,785	16,397	St. Clair	10,125	21,119
Ingham	11,193	21,921	St. Joseph	9,686	18,609
Ionia	9,578	20,037	Sanilac	8,583	16,629
Iosco	7,165	13,649	Schoolcraft	7,692	14,670
Iron	7,443	14,532	Shiawassee	10,540	21,737
Isabella	9,207	18,318	Tuscola	9,558	20,583
Jackson	10,726	21,364	Van Buren	8,735	17,700
Kalamazoo	11,037	22,211	Washtenaw	12,294	25,465
Kalkaska	6,686	15,691	Wayne	11,351	22,134
Kent	10,692	21,530	Wexford	8,024	15,884
Keweenaw	4,809	11,705	MICHIGAN	11,032	22,108

SOURCE: Bureau of the Census, special release.

a. Figures pertain to incomes received during 1969 and 1979.

TABLE VI-22. CONSUMER PRICE INDEXES FOR ALL URBAN CONSUMERS IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA AND THE URBAN UNITED STATES BY ITEM, ANNUAL AVERAGES: 1979-1983

	1979		1980		1981		1982		1983	
Items	Detroit	United States	Detroit	United States	Detroit	United States	Detroit	United States	Detroit	United States
All items	218.8	217.4	253.5	246.8	277.1	272.4	288.3	289.1	296.5	298.4
Food	226.5	234.5	245.2	254.6	264.2	274.6	274.3	285.7	273.7	291.7
Food at home	225.8	232.9	246.1	251.5	265.2	269.9	277.5	279.2	275.6	282.2
Cereals & bakery products	229.2	220.1	254.8	246.4	276.6	271.1	291.5	283.4	299.4	292.5
Meats, poultry, fish, eggs	225.9	234.2	235.5	242.2	250.8	252.8	263.8	262.1	260.8	261.0
Dairy products	221.2	207.1	242.3	227.4	252.5	243.6	257.8	247.0	253.5	250.0
Fruits and vegetables	202.6	230.0	220.6	246.7	250.9	276.3	265.3	291.4	256.6	292.2
Other foods at home	258.9	n.a.	295.8	n.a.	320.3	n.a.	334.3	n.a.	334.4	n.a.
Food away from home	237.4	242.9	253.0	267.0	272.7	291.0	278.1	306.5	280.4	319.9
Housing	229.4	227.6	278.9	263.3	304.6	293.5	314.2	314.7	327.7	323.1
Shelter	234.2	239.7	309.8	281.7	334.2	314.7	339.5	337.0	349.3	344.8
Rent	176.5	176.0	194.1	191.6	206.1	208.2	214.3	224.0	220.2	236.9
Homeownership[a]	258.9	262.4	332.8	314.0	359.7	352.7	363.9	376.8	101.6	102.5
Fuel & utilities	249.6	239.3	286.8	278.6	333.6	319.2	366.9	350.8	402.6	370.3
Fuel oil and coal	423.0	403.1	579.0	556.0	711.7	675.9	701.7	667.9	650.3	628.0
Gas (piped) & electricity	277.3	257.8	319.7	301.8	366.8	345.9	408.9	393.8	463.2	428.7
Hsehld. furnish. & oper.	174.7	190.3	188.5	205.4	205.5	221.3	213.3	233.2	217.5	213.7
Apparel and upkeep	148.1	166.6	155.6	178.4	159.1	186.9	162.2	191.8	166.6	196.5
Men's and boy's	150.2	160.8	149.5	168.4	159.2	177.5	163.0	183.9	160.8	183.9
Women's and girl's	129.2	151.9	138.5	155.1	135.5	157.5	132.4	159.1	141.0	161.9
Footwear	156.6	176.7	161.7	190.3	157.0	200.4	157.3	205.5	156.0	206.9
Transportation	210.0	212.0	246.8	249.7	279.7	280.0	291.8	291.5	293.7	298.4
Private	210.1	212.3	246.5	249.2	278.8	277.5	290.9	287.5	291.4	293.9
Public	207.3	200.3	253.9	251.6	298.6	312.0	310.9	346.0	348.1	362.6
Medical care	274.5	239.7	297.7	265.9	320.1	294.5	346.4	328.7	365.5	357.3

SOURCE: Michigan Department of Management and Budget, Economic Report of the Governor (Lansing: annually).

a. Index changed to rent equivalent--December 1982=100.

TABLE VI-23. CONSUMER PRICE INDEX FOR THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, BY MONTH: 1970-1983

(1967 = 100)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Urban wage earners and clerical workers													
1970	114.1	115.1	115.8	116.4	117.4	117.7	117.9	117.8	118.4	119.3	119.9	119.5	117.4
1971	120.3	120.0	120.1	120.1	120.9	121.8	121.8	122.8	122.8	122.8	123.4	123.7	121.7
1972	124.2	124.9	125.0	125.0	125.5	126.0	126.7	126.9	127.3	127.2	127.4	128.3	126.2
1973	128.5	129.7	131.1	132.4	133.4	133.7	133.8	136.8	137.3	137.9	139.0	140.0	134.5
1974	141.5	143.8	144.9	145.4	146.4	148.4	149.4	150.9	152.4	153.8	155.2	156.0	149.0
1975	155.5	156.5	157.0	157.7	158.1	159.7	160.8	161.3	162.8	163.1	163.9	164.6	160.1
1976	165.7	165.8	165.6	166.4	167.3	168.0	169.2	169.7	171.3	171.4	172.5	173.1	168.8
1977	173.8	175.1	176.8	179.0	179.3	181.0	182.5	182.6	182.8	183.1	184.5	184.4	180.4
1978	185.0	185.8	187.9	189.8	192.1	194.6	194.7	196.2	198.2	200.7	201.7	201.9	194.1
1979	204.9	208.8	211.6	213.2	214.1	215.5	219.8	222.6	223.5	226.9	230.8	232.2	218.7
1980	236.4	239.9	242.4	248.0	248.9	255.8	252.1	253.8	257.7	261.4	263.6	265.5	252.1
1981	264.4	265.5	263.6	268.0	271.3	275.9	278.9	279.1	280.2	278.2	276.4	275.1	273.1
1982	277.8	274.8	275.1	280.3	282.7	286.0	289.3	289.3	291.2	291.2	292.1	288.7	284.9
1983	288.0	287.1	289.8	295.0	298.0	300.7	303.8	303.7	299.2	298.2	301.8	301.3	297.8
All urban consumers													
1978	185.0	185.6	188.4	190.2	192.3	194.5	194.6	195.8	197.7	200.9	202.0	202.2	194.1
1979	205.1	208.8	211.6	213.2	213.9	215.4	219.5	222.2	223.7	227.2	231.3	233.2	218.8
1980	237.2	240.4	242.9	248.2	248.4	256.7	253.7	255.1	259.5	264.3	266.4	269.7	253.5
1981	268.5	270.2	268.2	272.4	275.2	280.5	283.1	283.5	284.2	281.5	279.6	278.3	277.1
1982	280.8	277.8	278.2	283.7	285.9	289.1	289.8	292.7	294.9	295.2	296.0	292.6	288.3
1983	292.6	292.3	292.4	294.9	294.9	296.6	298.4	298.8	304.6	298.9	299.9	300.1	296.5

SOURCE: Bureau of Lahor Statistics, special release.

VII. SOCIAL WELFARE

The Michigan Department of Social Services, charged with the responsibility for administering the state's public welfare and related programs, conducts research and functions as the repository of relevant data. Published sources include the Annual Report and the monthly publication, Social Services Statistics.

Information related to other social welfare programs is available from annual reports of the various agencies that administer them, for example, the Social Security Administration, the Veterans Administration, and the Railroad Retirement Board.

Data for Tables VII-1 and VII-2 were drawn from the tabulation released by the Bureau of Economic Analysis in conjunction with its personal income statistics program. A more complete statement of those data is included at the beginning of chapter VI.

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TABLE VII-1. TRANSFER PAYMENTS IN MICHIGAN AND THE UNITED STATES: 1958-1982

(In millions of dollars)

Year	Michigan	United States	Michigan as a percentage of the United States
1958	1,254	25,978	4.83
1959	1,154	27,064	4.26
1960	1,207	28,940	4.17
1961	1,425	32,817	4.34
1962	1,384	33,770	4.10
1963	1,411	35,838	3.94
1964	1,459	37,430	3.90
1965	1,575	40,414	3.90
1966	1,746	44,667	3.91
1967	2,079	52,595	3.95
1968	2,346	59,920	3.92
1969	2,601	66,650	3.90
1970	3,244	80,149	4.05
1971	3,844	94,435	4.07
1972	4,322	104,681	4.13
1973	4,816	119,512	4.03
1974	5,973	141,221	4.23
1975	7,836	178,308	4.39
1976	8,131	194,273	4.19
1977	8,432	207,897	4.06
1978	8,871	223,844	3.96
1979	10,117	250,260	4.04
1980	13,477	297,570	4.52
1981	14,196	337,175	4.21
1982	15,796	374,546	4.22

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NOTE: See Table VII-2 for listing of items comprising transfer payments.

TABLE VII-2. TRANSFER PAYMENTS TO INDIVIDUAL CITIZENS IN MICHIGAN AND THE UNITED STATES, BY ITEM: 1981 AND 1982[a]

(In millions of dollars)

Item	Michigan		United States	
	1981	1982	1981	1982
Old Age, Survivors, and Disability Insurance	5,806	6,446	138,644	153,713
Railroad retirement and disability	118	129	5,314	5,770
Federal employees retirement	266	292	18,168	19,861
State and local gov't employees retirement	631	701	17,129	19,010
Medical insurance payments[b]	1,914	2,245	43,671	51,202
Workmen's compensation[c]	83	83	2,989	3,157
Black Lung	22	21	1,724	1,652
Other government disability, insurance, and retirement programs[d]	.004	.005	935	1,050
Total government retirement, disability, and insurance programs	8,840	9,917	228,574	255,415
Unemployment insurance payments	1,544	2,025	16,765	25,042
Educational and training assistance payments[e]	139	116	4,890	4,518
Supplemental security income	250	263	8,592	8,981
Aid to families with dependent children	1,153	1,113	13,460	13,372
Bonus value of food stamps	429	483	10,065	9,910
Other assistance payments[f]	304	304	367	3,497
Total income maintenance programs	2,136	2,163	35,484	35,760
Other government transfer payments[g]	55	53	888	1,165
Total governments payments to individual civilians	12,715	14,275	286,602	321,901

TABLE VII-2. TRANSFER PAYMENTS TO INDIVIDUAL CITIZENS IN MICHIGAN AND THE UNITED STATES, BY ITEM: 1981 AND 1982 (cont.)

(In millions of dollars)

Item	Michigan 1981	Michigan 1982	United States 1981	United States 1982
Military pensions, retirement pay, and compensation	531	569	26,317	28,449
Educational payments to veterans and their dependents and survivors	57	43	1,945	1,067
Other payments to veterans[h]	40	49	1,541	1,590
Total military and veterans benefits	628	661	29,803	31,646
Total payments to nonprofit institutions	421	385	10,418	9,611
Total business transfer payments	432	475	10,352	11,388
Total transfer payments	14,196	15,796	337,175	374,546

SOURCE: Bureau of Economic Analysis, Regional Economic Information System.

a. Estimates for 1969-81 have been revised to reflect the 1980 comprehensive NIPA revisions.

b. Medicare.

c. Compensation to disabled government employees.

d. Payments to beneficiaries of state disability programs and beneficiares of the Panama Canal Construction Annuity Act.

e. National Science Foundation fellowships; other federal fellowships; subsistence of state marine school cadets; higher education loans-interest subsidy payments; basic education opportunity grants; area redevelopment payments, Manpower Development, Training and Assistance Act payments; and Job Corps payments.

f. Refugee Assistance payments (includes Cuban and Southeast Asia refugees), Civilian War Assistance and Enemy Aliens Act payments, foster home care in public facilites, special federal payments to selected individuals, and payments for earned income tax credit.

g. Bureau of Indian Affairs payments, education exchange, and payments for Alaska Native Claims Settlement Act.

h. Payments to paraplegics, for automobiles for disabled veterans, to war orphans, to children of disabled veterans, to prisoners of war; veterans' aid; and veterans' bonus payments by state and local government.

TABLE VII-3. ESTIMATED PROPORTION OF THE POPULATION AGED 65 AND OLDER RECEIVING OASDI CASH BENEFITS AND SSI PAYMENTS: MICHIGAN AND THE UNITED STATES: 1970-1980

	OASDI[a]		SSI[b]		Both	
Year	Michigan	United States	Michigan	United States	Michigan	United States
			Proportion per 1,000[c]			
1970[d]	911	855	45	104	30	63
1971[d]	915	849	53	102	31	62
1972[d]	918	856	52	96	33	61
1973[d]	941	867	48	89	31	56
1974[e]	946	883	61	96	40	68
1975[f]	951	904	63	111	44	78
1976[f]	947	908	56	104	39	73
1977[f]	952	916	62	100	44	70
1978[f]	953	921	60	96	43	67
1979[f]	967	925	59	92	42	64
1980[e]	965	914	54	87	38	62

SOURCE: Social Security Administration, Social Security Bulletin, Annual Statistical Supplement (Washington, D.C.).

a. Old age, survivors, and disability insurance program of the federal government (Social Security).

b. For 1970-1973, data refer to old age assistance program; beginning January 1974, the supplemental security income program superseded the old age assistance program in the 50 states and District of Columbia.

c. Number per 1,000 population aged 65 and over.

d. February data.

e. June data.

f. December data.

TABLE VII-4. AMOUNT OF OASDI CASH BENEFITS PAID IN MICHIGAN AND THE UNITED STATES, BY TYPE OF PROGRAM: 1977-1982

(In millions of dollars)

Program	1977	1978	1979	1980*	1981*	1982*
			Michigan			
Total cash benefits paid	$ 3,521	$ 3,834	$ 4,199	$ 5,000	$ 5,850	$ 6,446
OASI	3,010	3,284	3,609	4,327	5,100	5,690
DI	511	550	590	670	745	754
Old age & survivors insurance	3,010	3,284	3,609	4,327	5,100	5,690
Monthly benefits	2,998	3,271	--	--	--	--
Retired Workers	1,913	2,103	2,327	2,809	3,340	3,791
Dependents	223	247	271	322	380	415
Survivors	857	916	1,007	1,196	1,380	1,484
Special age-72	5	4	4	3	5	6
Lump sum death payments	12	13	--	--	--	--
Disability insurance:						
Monthly benefits	511	550	590	670	745	754
Disabled workers	420	452	484	553	620	641
Dependents	91	98	105	117	125	113
			United States			
Total cash benefits paid	$84,576	$92,865	$101,229	$120,427	$140,995	$156,173
OASI	73,113	80,352	87,801	104,916	123,685	138,715
DI	11,463	12,513	13,428	15,437	17,200	17,339
Old age & survivors insurance	73,113	80,352	87,801	104,916	123,685	138,715
Monthly benefits	72,801	80,008	87,461	--	--	--
Retired workers	48,134	53,255	58,342	70,359	83,615	98,175
Dependents	5,300	5,904	6,374	7,547	8,865	9,755
Survivors	19,210	20,707	22,745	27,010	31,205	33,785
Special age-72	157	142	131	119	110	119
Lump sum death payments	312	344	340	--	--	--
Disability insurance:						
Monthly benefits	11,463	12,513	13,428	15,437	17,200	17,339
Disabled workers	9,456	10,315	11,090	12,817	14,380	14,810
Dependents	2,006	2,198	2,338	2,621	2,820	2,529

SOURCE: Social Security Administration, Social Security Bulletin, Statistical Summaries (Washington, D.C.).

*: Lump sum death payments are not being separated.

TABLE VII-5. NUMBER, BY TYPE OF BENEFIT, OF OASDI CURRENT-PAY BENEFITS, MICHIGAN AND THE UNITED STATES: DECEMBER 1972-1980

(In thousands)

			Spouses of		Children of				Widows	
Year	Retired workers	Disabled workers	Retired workers	Disabled workers	Retired workers	Deceased workers	Disabled workers	Widowed parents	and widowers	Total[a,b]
					Michigan					
1972	561	75	111	14	21	119	44	22	148	1,128
1973	585	84	112	15	22	122	48	23	153	1,175
1974	603	95	112	17	22	122	53	23	157	1,213
1975	625	105	113	19	23	123	59	24	161	1,258
1976	643	112	114	19	23	123	62	24	164	1,291
1977	662	116	115	20	25	120	62	24	168	1,317
1978	678	116	115	19	23	115	60	23	171	1,325
1979	689	115	114	19	23	115	59	23	173	1,334
1980	723	113	116	18	23	108	54	23	177	1,359
					United States					
1972	14,555	1,832	2,734	350	582	2,845	1,088	540	3,509	28,476
1973	15,365	2,016	2,808	381	613	2,912	1,161	572	3,656	29,869
1974	15,958	2,237	2,826	412	619	2,893	1,263	574	3,770	30,853
1975	16,588	2,489	2,867	453	643	2,919	1,411	582	3,889	32,085
1976	17,165	2,670	2,896	474	653	2,903	1,480	579	3,995	33,023
1977	17,821	2,838	2,961	495	695	2,860	1,528	583	4,120	34,079
1978	18,358	2,880	2,980	492	661	2,780	1,497	576	4,212	34,586
1979	18,591	2,878	2,966	483	645	2,745	1,466	567	4,260	34,739
1980	19,562	2,859	3,016	462	639	2,610	1,357	562	4,411	35,585

SOURCE: Social Security Administration, Social Security Bulletin, (Washington, D.C..

a. Total is not identical sum: Parents and special age - 72 beneficiaries are not listed for years 1972-79.

b. As of the end of 1982, totals do not include an estimated 52,000 Railroad Retirement beneficiaries who would have been eligible for Social Security had they applied.

TABLE VII-6. NUMBER AND AVERAGE MONTHLY BENEFITS OF RETIRED WORKERS UNDER OASDI, CURRENT-PAY BENEFITS, MICHIGAN AND THE UNITED STATES: DECEMBER 1972-1981[a]

	Number (In thousands)		Amount	
Year	Michigan	United States	Michigan	United States
1972	561	14,555	$ 177.18	$ 162.35
1973	585	15,365	180.80	166.42
1974	603	15,959	204.17	188.21
1975	624	16,557	224.42	207.42
1976	643	17,165	243.08	224.86
1977	662	17,832	262.11	242.98
1978	678	18,358	n.a.	263.19
1979	689	18,970	n.a.	294.27
1980	723	19,562	367.82	341.39
1981	n.a.	20,195	n.a.	385.97

SOURCE: Social Security Administration, Social Security Bulletin, December 1972 through December 1981 (Washington, D.C.).

a. Not included are retired persons receiving Social Security benefits as part of their Railroad Retirement annuity. As of December 1982, this set equaled an estimated 26,000 retired workers in the United States. n.a.: not available.

TABLE VII-7. NUMBER OF RECIPIENTS AND AVERAGE MONTHLY CASH BENEFITS PER RECIPIENT UNDER AID TO FAMILIES WITH DEPENDENT CHILDREN, MICHIGAN AND THE UNITED STATES: DECEMBER 1972-1981

	Number (In thousands)		Amount	
Year	Michigan	United States	Michigan	United States
1972	590	11,069	$ 67.96	$ 54.10
1973	600	10,815	74.03	56.95
1974	642	11,006	80.14	64.85
1975	676	11,383	88.43	71.72
1976	653	11,184	92.28	75.48
1977	623	10,761	99.08	79.46
1978	620	10,325	115.80	86.33
1979	638	10,316	122.37	93.09
1980	753	11,101	127.88	99.61
1981	754	11,079	122.15	97.64

SOURCE: Social Security Administration, Social Security Bulletin (Washington, D.C.).

TABLE VII-8. NUMBER OF RECIPIENTS AND AVERAGE MONTHLY CASH BENEFITS UNDER GENERAL ASSISTANCE, MICHIGAN AND THE UNITED STATES: DECEMBER 1972-1981

Year	Number (In thousands)		Amount	
	Michigan	United States	Michigan	United States
1972	63	865	$ 96.13	$ 72.10
1973	49	700	122.26	81.95
1974	67	851	121.92	96.35
1975	76	977	130.66	102.07
1976	66	905	143.85	116.54
1977	51	820	147.24	124.34
1978	53	766	161.29	128.11
1979	84	885	161.33	123.31
1980	123	986	155.07	129.84
1981[a]	118	1,008	n.a.	n.a.

SOURCE: Social Security Administration, Social Security Bulletin, June 1974 through June 1983 (Washington, D.C.: monthly).

a. September data.
n.a.: Data not available

TABLE VII-9. SUPPLEMENTAL SECURITY INCOME FOR THE AGED, FEDERALLY ADMINISTRATED PAYMENTS, MICHIGAN AND THE UNITED STATES: DECEMBER 1972-1982

(In thousands)

Year	Number		Amount of payment	
	Michigan	United States	Michigan	United States
1972	41	1,934	$ 80.68	$ 79.95
1973	38	1,820	73.85	76.15
1974	49	2,286	94.62	91.09
1975	52	2,307	98.72	90.93
1976	47	2,148	100.77	94.35
1977	45	2,051	107.45	96.62
1978	43	1,968	116.29	100.43
1979	41	1,872	127.05	122.65
1980	38	1,808	132.26	126.84
1931	34	1,678	131.46	--
1982	31	1,549	139.12	145.69

SOURCE: Social Security Administration, Social Security Bulletin, April 1975 through April 1982 (Washington, D.C.).

NOTE: For 1970 to 1973, data refer to old age assistance program; beginning in January 1974, the supplemental security income program superseded the old age assistance program in the 50 states and District of Columbia.

TABLE VII-10. SUPPLEMENTAL SECURITY INCOME FOR THE BLIND, MICHIGAN AND THE UNITED STATES: DECEMBER 1971-1982

Year	Number (In thousands)		Amount[a]	
	Michigan	United States	Michigan	United States
1971	1.6	80.3	$122.08	$106.39
1972	1.7	79.8	114.27	112.85
1973	1.7	77.9	113.15	112.00
1974	1.7	74.6	143.64	140.57
1975	1.7	74.5	149.05	146.57
1976	1.6	76.4	148.37	152.77
1977	1.7	77.4	159.41	159.20
1978	1.7	77.1	170.85	164.40
1979	1.8	77.3	188.12	212.27
1980	1.9	78.4	206.88	213.23
1981	1.9	78.6	221.29	227.70
1982	1.9	77.4	243.14	241.59

TABLE VII-11. NUMBER OF RECIPIENTS AND AVERAGE MONTHLY CASH BENEFITS UNDER SUPPLEMENTAL SECURITY INCOME FOR THE PERMANENTLY AND TOTALLY DISABLED, MICHIGAN AND THE UNITED STATES: DECEMBER 1971-1982

Year	Number (In thousands)		Amount[a]	
	Michigan	United States	Michigan	United States
1971	38	1,068	$111.29	$102.25
1972	48	1,168	111.29	106.15
1973	54	1,275	121.56	109.75
1974	60	1,635	147.05	144.28
1975	66	1,933	151.38	141.15
1976	68	2,012	153.66	145.50
1977	71	2,109	160.53	150.36
1978	73	2,172	175.07	154.82
1979	74	2,201	195.35	181.71
1980	74	2,256	209.72	197.90
1981	75	2,262	227.77	214.49
1982	75	2,231	242.70	299.04

SOURCE: Social Security Administration *Social Security Bulletin*, Annual Statistical Supplement (Washington, D.C.).

[a] Amounts combined: federal and state payments.

TABLE VII-12. ESTIMATED EXPENDITURES IN MICHIGAN BY THE VETERANS ADMINISTRATION: FISCAL YEARS 1976-1982

(In millions of dollars)

Item	1976	1977	1978	1979	1980	1981	1982
Compensation and pensions	264.7	282.7	296.1	315.8	334.4	363.0	390.3
Vocational rehabilitation and education	204.0	124.8	101.0	77.0	67.5	67.7	47.2
Direct loans	.1	.1	.09	.0	.11	.15	.15
Insurance & indemnities	26.8	30.3	29.4	32.7	34.6	30.0	43.8
Hospital and domiciliary construction	2.2	1.2	2.1	1.8	4.6	3.1	5.9
Administrative costs and other benefits	108.9	122.4	135.7	149.2	159.2	170.5	189.0
Total	606.6	561.6	564.3	576.6	599.9	634.5	676.4

SOURCE: Administrator of Veterans Affairs, Annual Report, (Washington, D.C.: annually).

TABLE VII-13. BENEFITS PAID IN MICHIGAN UNDER THE RAILROAD RETIREMENT AND UNEMPLOYMENT INSURANCE ACTS, BY CLASS OF BENEFIT: FISCAL YEARS 1970-1983

(In thousands of dollars)

Year	Retirement	Survivor	Unemployment	Sickness	Total
1970	28,007	10,079	957	1,510	40,553
1971	33,828	11,520	1,974	1,494	48,817
1972	37,395	12,514	2,630	1,226	53,766
1973	42,249	14,961	1,681	1,095	59,988
1974	44,761	16,658	1,010	905	63,334
1975	50,429	19,381	2,047	952	72,809
1976	55,276	22,753	4,625	2,692	85,346
1977	59,764	24,575	3,419	2,709	90,466
1978	62,536	25,733	4,042	2,517	94,829
1979	67,127	27,326	2,762	2,381	99,596
1980	73,702	30,172	9,260	2,570	115,704
1981	81,965	34,195	9,575	2,109	127,844
1982	89,449	36,367	10,510	1,965	138,391
1983	95,400	37,300	14,900	1,700	132,700

SOURCE: Railroad Retirement Board, Annual Report (Chicago, IL: annually).

TABLE VII-14. NUMBER OF FOOD STAMP RECIPIENTS IN MICHIGAN, FISCAL YEARS: 1974-1983

(Monthly average number of persons)

Year	Total	In public assistance households	In nonpublic assistance households
1974	533,225	429,516	103,709
1975	642,412	473,839	168,573
1976	681,979	500,356	181,623
1977	631,748	490,984	140,764
1978	567,692	441,412	126,280
1979	633,550	480,760	152,790
1980	813,102	588,328	224,774
1981	941,532	720,490	221,042
1982	982,930	739,049	243,881
1983	1,082,632	806,059	276,573

SOURCE: Michigan Department of Social Services, Data Reporting Section, special release.

TABLE VII-15. VALUE OF FOOD STAMPS ISSUED IN MICHIGAN, FISCAL YEARS: 1974-1983

Year	Annual value[a] ($000)	Bonus value[b] ($000)	Average monthly bonus per person
1974	$ 180,063	$ 79,753	$ 12.46
1975	257,212	123,343	16.00
1976	299,442	143,677	17.56
1977	285,500	132,186	17.46
1978	270,400	124,925	18.36
1979	210,000	210,000	27.62
1980	262,764	262,764	26.93
1981	393,972	393,972	34.87
1982	448,920	448,920	38.06
1983	569,676	569,676	43.85

SOURCE: Michigan Department of Social Services, Data Reporting Section, special release.

a. Available for food purchases.

b. Difference between value and purchase requirement. The change in federal regulations effective fiscal year 1979 also eliminates the distinction between total value of coupons and the bonus value.

TABLE VII-16. MEDICAL ASSISTANCE (MEDICAID) RECIPIENTS AND EXPENDITURES FOR MEDICAL ASSISTANCE IN MICHIGAN, BY TYPE OF CASE AND TYPE OF SERVICE, FISCAL YEARS: 1982 AND 1983

Classification	Year	Recipients[a]	Expenditures	Average per recipient[b]
		Type of case		
Age 65 and over	1982	90,748	$328,093,099	$ 3,615.43
	1983	87,251	357,206,923	4,091.95
Blind	1982	1,923	4,627,639	2,406.47
	1983	1,986	4,833,606	2,433.84
Disabled	1982	119,505	446,844,971	3,739.13
	1983	118,896	485,166,318	4,080.59
Dependent children under age 21	1982	684,629	210,981,840	308.17
	1983	688,673	235,200,833	341.53
Adults in families with dependent children	1982	347,310	291,128,214	838.24
	1983	358,486	323,445,951	902.26
Other Title XIX recipients	1982	11,040	10,954,928	992.29
	1983	24,156	16,029,819	663.60
		Type of service		
Inpatient general hospital services	1982	149,339	358,401,574	2,399.92
	1983	156,400	449,238,161	2,872.37
Inpatient mental hospital services	1982	2,749	29,811,197	10,844.38
	1983	2,728	31,021,246	11,371.42
Intermediate care services:				
Mentally retarded	1982	4,392	149,989,327	34,150.58
	1983	4,017	148,036,021	36,852.38
Other	1982	36,717	237,647,625	6,472.41
	1983	37,334	266,639,480	7,142.00
Physicians' services	1982	835,794	152,614,840	182.60
	1983	861,939	161,816,716	187.74
Dental services	1982	264,013	23,471,542	88.90
	1983	293,010	24,863,021	84.85
Other practitioners' services	1982	168,133	8,562,113	50.92
	1983	169,331	8,659,453	51.14
Outpatient hospital services	1982	445,591	67,927,810	152.44
	1983	446,704	53,089,616	118.85
Clinic services	1982	28,102	1,145,198	40.75
	1983	28,874	1,413,507	48.95
Lab & radiological	1982	232,836	16,141,936	69.28
	1983	252,956	17,048,835	67.40
Home health services	1982	5,861	4,267,251	728.08
	1983	6,811	4,738,154	695.66

TABLE VII-16. MEDICAL ASSISTANCE (MEDICAID) RECIPIENTS AND EXPENDITURES FOR MEDICAL ASSISTANCE IN MICHIGAN, BY TYPE OF CASE AND TYPE OF SERVICE, FISCAL YEARS: 1982 AND 1983 (cont.)

Classification	Year	Recipients[a]	Expenditures	Average per recipient[b]
		Type of service (cont.)		
Prescribed drugs	1982	742,825	$71,581,129	$ 96.36
	1983	774,896	77,560,984	100.09
Family planning services	1982	148,524	16,100,918	108.41
	1983	148,931	16,770,199	112.60
SNF services	1982	20,508	94,772,576	4,621.25
	1983	19,304	95,854,903	4,965.55
Early and periodic screening	1982	128,836	6,010,222	48.53
	1983	113,537	5,430,555	47.83
Other care	1982	167,539	54,185,343	323.42
	1983	169,227	59,523,139	351.74
TOTAL	1982	1,174,833	1,292,630,601	1,100.27
	1983	1,187,612	1,421,703,450	1,197.11

SOURCE: Michigan Department of Social Services, *Medical Assistance (Medicaid) Fiscal Year 1982* (Lansing: annually), Table 1 and *Medical Assistance (Medicaid) Fiscal Year 1983* (Lansing: annually), Table 1.

[a] The sum of recipients by type of service adds to more than the total because more than one type of service was provided to many recipients.

[b] Number of recipients and average per recipient values are monthly averages.

TABLE VII-17. SUMMARY OF MICHIGAN PUBLIC ASSISTANCE: JANUARY 1983 AND 1984

Program	1983	1984	Percentage change
	Persons or cases		
Aid to families with dependent children			
Number of families			
Unemployed parent	46,428	47,021	+ 1.3
Regular segment	191,516	196,576	- 6.8
Number of recipients			
Unemployed parent	191,146	193,591	+ 2.6
Regular segment	555,503	563,675	+ 1.5
General assitance			
Cases with children	6,478	9,512	+ 46.8
Cases without children	123,129	145,328	+ 18.0
Number of recipients	157,000	191,885	+ 22.2
Emergency assistance			
Families receiving AFDC	2,577	3,085	+ 19.7
Families not receiving AFDC	560	531	- 5.2
Recipients receiving AFDC	9,294	10,841	+ 16.7
Recipients not receiving AFDC	2,011	1,930	- 4.0
Food Stamps			
Households receiving public assistance	301,227	330,944	+ 9.9
Households not receiving public assistance	129,537	115,849	- 10.6
Recipients receiving other public assistance	788,191	838,718	+ 6.4
Recipients not receiving other public assistance	292,059	249,159	- 14.7
Total recipients of money payments	1,190,894	1,188,054	- 0.2
	Amounts ($1,000)		
Aid to families with dependent children			
Unemployed parent	22,677	23,967	+ 5.7
Regular segment	76,465	82,558	+ 8.0
General assistance	25,741	31,160	+ 21.1
Emergency assistance			
Receiving AFDC	557.5	597.5	+ 7.2
Not receiving AFDC	146.5	125.5	- 14.3

TABLE VII-17. SUMMARY OF MICHIGAN PUBLIC ASSISTANCE: JANUARY 1983 AND 1984 (cont.)

Program	1983	1984	Percentage change
	Amounts ($1,000) (cont.)		
Food stamps value	48,179	49,717	+ 3.2
Refugee and Cuban/Hatian assistance	185,847	137,808	- 25.9
Medical assistance	114,118	121,196	+ 6.2
Total amount of money payments	173,766	188,126	+ 8.3
	Amounts per family or recipient		
Aid to families with dependent children			
Per family			
Unemployed parent	488.42	509.71	+ 4.4
Regular segment	399.26	419.98	+ 5.2
Per recipient			
Unemployed parent	118.63	123.80	+ 4.4
Regular segment	137.65	146.46	+ 6.4
General assistance			
Per case	198.61	201.24	+ 1.3
Per recipient	170.47	162.39	- 4.7
Emergency assistance			
Per case	224.39	199.93	- 10.9
Per recipient	62.67	56.61	- 9.1
Food stamps			
Bonus per household	111.84	111.28	- 0.5
Bonus per recipient	44.60	45.70	+ 2.5
Total expenditures per family recipient	145.90	158.40	+ 8.4

SOURCE: Michigan Department of Social Services, Assistance Payments Statistics (Lansing: monthly), January 1984, Table 1.

TABLE VII-18. ERROR RATES FOR AID TO FAMILIES WITH DEPENDENT CHILDREN: OCTOBER 1978 - SEPTEMBER 1983

(Percentage of total cases)

Reporting period	Source		Type			Total
	Agency	Client	Ineligible	Overpayment	Underpayment	
Oct 1978-Mar 1979	18.1	15.1	4.6	19.7	8.9	33.2
Apr-Sep 1979	13.6	15.1	4.7	17.1	7.0	28.8
Oct 1979-Mar 1980	16.3	12.9	4.3	16.3	8.7	29.2
Apr-Sep 1980	14.5	10.9	4.4	14.2	6.7	25.4
Oct 1980-Mar 1981	13.5	11.8	3.7	14.7	6.9	25.3
Apr-Sep 1981	11.1	10.6	3.4	13.8	4.5	21.7
Oct 1981-Mar 1982	14.6	11.5	6.1	14.8	5.1	26.0
Apr-Sep 1982	19.4	9.7	5.6	17.3	6.2	29.1
Oct 1982-Mar 1983	18.9	10.9	6.1	17.4	6.3	29.8
Apr-Sep 1983	18.9	10.6	6.5	16.1	7.0	29.5

SOURCE: State of Michigan, Department of Social Services, Office of Standards and Investigations, special release.

TABLE VII-19. MISPAYMENT RATES FOR AID TO FAMILIES WITH DEPENDENT CHILDREN: OCTOBER 1978 - SEPTEMBER 1983

(Percentage of total funds)

Reporting period	Ineligible cases	Overpayment cases	Underpayment cases	Total[a]
Oct 1978-Mar 1979	4.3	5.5	0.8	10.7
Apr-Sep 1979	4.3	4.9	0.8	10.0
Oct 1979-Mar 1980	3.9	4.5	1.0	9.4
Apr-Sep 1980	3.8	3.6	0.7	8.1
Oct 1980-Mar 1981	3.0	3.9	0.7	6.9
Apr-Sep 1981	3.5	3.7	0.4	7.1
Oct 1981-Mar 1982	5.3	4.0	0.6	9.4
Apr-Sep 1982	5.3	3.5	0.6	8.7
Oct 1982-Mar 1983	6.0	3.6	0.7	9.5
Apr-Sep 1983	5.9	3.8	0.8	9.7

SOURCE: State of Michigan, Department of Social Services, Office of Standards and Investigations, special release.

a. Total includes only ineligible and overpayment cases.

TABLE VII-20. NUMBER AND AMOUNT OF MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS BY TYPE OF BENEFICIARY: DECEMBER 1982

	Number of Beneficiaries						Amount ($1,000) of monthly benefits	
			Dependents of					
County	Retired workers	Disabled workers	Retired workers	Disabled workers	Survivors	Total[a]	Retired workers only	Total[b]
Alcona	1,997	194	406	114	507	3,218	835	1,207
Alger	1,148	184	231	86	383	2,032	464	748
Allegan	6,750	797	1,172	437	2,165	11,321	2,948	4,414
Alpena	3,568	448	728	206	1,419	6,367	1,549	2,489
Antrim	2,301	225	435	132	568	3,661	967	1,396
Arenac	1,915	247	425	156	624	3,347	815	1,257
Baraga	1,166	133	247	68	362	1,976	473	716
Barry	3,743	448	651	240	1,053	6,135	1,618	2,397
Bay	9,998	1,270	2,107	658	4.150	18,193	4,497	7,234
Benzie	1,519	163	258	105	339	2,384	628	889
Berrien	17,123	2,245	2,666	1,386	5,931	29,351	7,539	11,456
Branch	4,045	478	661	276	1,240	6,700	1,761	2,599
Calhoun	13,446	2,105	1,892	966	4,485	22,894	5,976	9,116
Cass	4,218	456	683	219	1,248	6,824	1,816	2,652
Charlevoix	2,568	244	459	144	695	4,112	1,070	1,548
Cheboygan	2,561	271	471	127	730	4,162	1,058	1,563
Chippewa	3,270	366	656	172	1,136	5,590	1,313	2,028
Clare	3,522	535	675	283	1,013	6,028	1,470	2,271
Clinton	3,219	315	717	169	1,216	5,564	1,366	2,148
Crawford	1,178	142	209	64	300	1,893	500	735
Delta	4,100	536	853	323	1,524	7,354	1,652	2,671
Dickinson	3,518	374	645	138	1,152	5,827	1,435	2,186
Eaton	5,054	512	901	291	1,826	8,584	2,225	3,387
Emmet	2,851	245	479	131	916	4,622	1,199	1,772
Genesee	30,311	6,088	5,845	3,481	14,272	59,997	13,783	24,164

TABLE VII-20. NUMBER AND AMOUNT OF MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS BY TYPE OF BENEFICIARY: DECEMBER 1982 (cont.)

County	Number of Beneficiaries						Amount ($1,000) of monthly benefits	
			Dependents of					
	Retired workers	Disabled workers	Retired workers	Disabled workers	Survivors	Total[a]	Retired workers only	Total[b]
Gladwin	2,774	362	551	189	755	4,631	1,172	1,766
Gogebic	3,187	373	636	251	1,165	5,611	1,310	2,069
Grand Traverse	5,842	612	913	245	1,795	9,407	2,507	3,699
Gratiot	3,742	394	738	230	1,447	6,551	1,591	2,483
Hillsdale	4,066	468	690	303	1,334	6,861	1,741	2,607
Houghton	4,804	462	1,070	202	1,681	8,219	1,952	3,005
Huron	4,670	393	1,085	201	1,654	8,005	1,929	2,916
Ingham	19,234	2,193	3,330	1,261	7,310	33,328	8,923	13,564
Ionia	4,331	553	778	277	1,503	7,442	1,843	2,840
Iosco	3,6[illegible]	425	735	254	1,011	6,123	1,551	2,322
Iron	2,597	275	579	158	819	4,428	1,064	1,632
Isabella	2,997	339	630	239	1,221	5,426	1,298	2,047
Jackson	13,294	1,691	2,016	839	4,388	22,228	6,044	9,104
Kalamazoo	16,655	2,002	2,512	894	5,305	27,368	7,661	11,300
Kalkaska	1,166	175	215	91	351	1,998	480	744
Kent	39,161	4,324	6,160	1,928	12,723	64,296	17,593	26,103
Keweenaw	437	45	116	39	113	750	180	270
Lake	1,615	206	269	115	372	2,577	642	928
Lapeer	3,986	600	850	395	1,843	7,674	1,760	2,982
Leeland	1,665	114	332	52	346	2,509	695	952
Lenawee	8,282	1,037	1,370	512	2,789	14,017	3,616	5,545
Livingston	5,469	623	990	387	2,080	9,549	2,493	3,882
Luce	839	150	150	82	319	1,540	356	562
Mackinac	1,433	149	205	80	402	2,349	582	860
Macomb	49,299	6,502	8,714	3,151	21,674	89,340	23,240	37,548

TABLE VII-20. NUMBER AND AMOUNT OF MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS BY TYPE OF BENEFICIARY: DECEMBER 1982 (cont.)

	Number of Beneficiaries						Amount ($1,000) of monthly benefits	
			Dependents of					
County	Retired workers	Disabled workers	Retired workers	Disabled workers	Survivors	Total[a]	Retired workers only	Total[b]
Sanilac	7,841	438	1,008	245	1,560	7,841	1,932	2,944
Schoolcraft	2,059	148	258	101	406	2,059	471	754
Shiawassee	9,607	653	962	387	2,185	9,607	2,373	3,763
Tuscola	8,666	574	1,067	353	2,007	8,666	2,030	3,315
Van Buren	11,880	921	1,099	568	2,149	11,880	2,996	4,458
Washtenaw	24,425	2,184	2,108	944	5,173	24,425	6,696	10,328
Wayne	362,199	30,840	33,200	14,819	87,827	362,199	89,502	146,298
Wexford	4,860	380	518	177	935	4,860	1,201	1,830
MICHIGAN	1,365,173	103,027	137,655	52,830	299,240	1,365,173	348,046	547,940

SOURCE: Social Security Administration: special release.

a. Total includes special age 72 beneficiaries.
b. Total includes retired workers, disabled workers, and all other beneficiaries.

TABLE VII-21. MONTHLY AVERAGE NUMBER OF MEDICAL ASSISTANCE (MEDICAID) RECIPIENTS, BY COUNTY, FISCAL YEARS: 1982 AND 1983

	Number			Number	
County	1982	1983	County	1982	1983
Alcona	521	568	Lake	790	812
Alger	409	410	Lapeer	3,166	3,384
Allegan	2,778	2,838	Leelanau	278	279
Alpena	1,586	1,759	Lenawee	3,348	3,702
Antrim	754	805	Livingston	2,342	2,377
Arenac	1,012	1,071	Luce	609	614
Baraga	448	492	Mackinac	430	442
Barry	1,603	1,760	Macomb	17,273	18,348
Bay	5,455	6,091	Manistee	942	1,099
Benzie	626	645	Marquette	2,135	2,327
Berrien	10,323	10,515	Mason	1,149	1,170
Branch	2,292	2,440	Mecosta	1,286	1,376
Calhoun	7,939	8,333	Menominee	853	877
Cass	2,228	2,292	Midland	2,287	2,327
Charlevoix	795	870	Missaukee	520	476
Cheboygan	1,069	1,199	Monroe	4,745	5,233
Chippewa	1,348	1,376	Montcalm	2,248	2,420
Clare	1,738	1,902	Montmorency	492	542
Clinton	1,141	1,247	Muskegon	10,167	10,494
Crawford	573	622	Newaygo	2,083	2,110
Delta	1,614	1,810	Oakland	24,983	26,983
Dickinson	830	891	Oceana	1,299	1,345
Eaton	2,009	2,153	Ogemaw	1,360	1,437
Emmet	860	925	Ontonagon	421	429
Genesee	25,015	27,258	Osceola	996	1,053
Gladwin	1,272	1,357	Oscoda	402	395
Gogebic	904	901	Otsego	727	724
Grand Traverse	1,849	1,923	Ottawa	2,964	3,053
Gratiot	1,970	2,061	Presque Isle	542	580
Hillsdale	1,633	1,891	Roscommon	925	990
Houghton	1,798	1,807	Saginaw	12,468	13,469
Huron	1,481	1,528	St. Clair	6,292	6,954
Ingham	11,178	11,203	St. Joseph	2,346	2,349
Ionia	2,308	2,408	Sanilac	1,788	1,954
Iosco	1,154	1,184	Schoolcraft	474	493
Iron	723	724	Shiawassee	2,765	3,216
Isabella	2,443	2,412	Tuscola	2,733	2,786
Jackson	6,582	6,870	Van Buren	4,332	4,408
Kalamazoo	7,864	8,226	Washtenaw	7,081	7,530
Kalkaska	659	668	Wayne	187,436	189,335
Kent	15,357	16,096	Wexford	1,565	1,555
Keweenaw	87	93	MICHIGAN	455,266	473,067

SOURCE: Michigan Department of Social Services, Medical Assistance (Medicaid), Fiscal Year 1982 (Lansing: 1983), and Medical Assistance (Medicaid), Fiscal Year, 1983 (Lansing: 1984).

TABLE VII-22. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1982 AND 1983 (cont.)

County	Year	Inpatient hospital: General hospital	Inpatient hospital: Mental hospital	Skilled nursing	Intermediate care facility	Physicians	Dental	Total[a]
Charlevoix	1982	$ 374,102	$ 21,701	$ 93,563	$ 798,402	$ 167,881	$ 43,498	$ 1,791,769
	1983	486,292	24,146	120,038	958,254	188,205	43,017	2,126,568
Cheboygan	1982	593,636	31,142	184,259	731,264	315,624	55,835	2,315,830
	1983	842,720	17,464	196,408	1,012,004	405,405	68,097	2,977,655
Chippewa	1982	931,050	49,738	450,893	1,161,486	289,164	52,533	3,482,047
	1983	1,165,578	16,869	411,033	1,345,369	341,097	63,939	3,922,836
Clare	1982	1,150,189	28,728	301,403	959,041	517,348	117,617	3,693,653
	1983	1,293,819	60,625	274,988	915,352	585,195	157,595	3,951,605
Clinton	1982	685,585	11,892	27,685	592,964	340,743	498,888	2,092,625
	1983	712,469	29,051	20,559	927,335	363,236	56,245	2,517,988
Crawford	1982	327,289	75,726	110,528	102,177	135,968	32,220	1,009,149
	1983	518,701	40,117	119,403	354,541	155,910	37,420	1,470,331
Delta	1982	713,003	60,033	1,371,114	2,211,895	355,111	63,227	5,341,774
	1983	846,928	38,250	1,531,433	2,381,470	463,882	78,044	6,019,394
Dickinson	1982	379,040	12,460	139,023	990,265	156,132	43,768	2,018,419
	1983	508,531	31,020	83,349	1,123,771	204,605	48,710	2,291,727
Eaton	1982	1,107,365	67,651	438,121	1,816,090	496,627	63,456	4,759,909
	1983	1,289,036	92,944	449,692	2,049,556	549,753	79,923	5,258,737
Emmet	1982	477,636	111,804	241,332	1,263,685	216,122	39,265	2,701,943
	1983	594,923	61,675	301,972	1,614,901	247,990	42,203	3,211,113
Genesee	1982	17,261,928	1,463,751	4,001,260	7,107,388	9,218,910	1,138,495	50,342,544
	1983	21,729,034	1,080,466	4,108,366	7,699,285	10,092,904	1,270,336	56,558,225
Gladwin	1982	733,156	39,431	117,949	391,332	374,865	79,739	2,230,066
	1983	840,489	14,955	107,665	448,551	407,726	89,102	2,407,734

TABLE VII-22. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1982 AND 1983 (cont.)

County	Year	Inpatient hospital		Skilled nursing	Intermediate care facility	Physicians	Dental	Total[a]
		General hospital	Mental hospital					
Gogebic	1982	$ 438,357	$ 26,333	$ 529,296	$1,358,739	$ 180,528	$ 49,428	$ 2,870,074
	1983	386,931	15,222	403,541	1,579,321	190,758	46,188	2,914,035
Grand Traverse	1982	995,005	71,471	1,503,684	21,378,832	478,300	86,904	6,216,088
	1983	1,121,490	36,728	1,467,883	2,950,502	498,084	94,586	6,991,910
Gratiot	1982	1,031,173	16,176	154,900	1,859,304	521,764	87,040	4,332,948
	1983	1,024,958	97,804	177,965	2,167,598	560,243	88,777	4,732,857
Hillsdale	1982	1,059,241	20,077	424,181	2,119,284	390,554	67,701	4,717,492
	1983	1,549,596	21,862	323,756	2,141,225	506,061	80,247	5,377,684
Houghton	1982	947,467	44,161	2,334,636	1,454,656	372,745	94,116	5,812,046
	1983	961,322	49,353	2,166,826	1,903,350	414,603	97,135	6,237,215
Huron	1982	716,312	36,554	766,226	1,341,934	377,397	71,659	3,812,882
	1983	846,275	63,702	725,920	1,602,098	374,206	72,492	4,242,739
Ingham	1982	6,675,223	787,949	1,359,925	5,793,503	3,053,864	515,854	22,842,396
	1983	8,341,784	887,147	943,425	7,155,581	3,150,156	528,651	25,167,213
Ionia	1982	1,315,258	44,670	206,777	1,525,027	740,037	115,516	4,711,452
	1983	1,456,210	63,890	163,988	1,716,132	742,289	119,058	5,012,948
Iosco	1982	597,336	66,845	264,885	1,003,059	273,601	87,886	2,681,091
	1983	717,596	77,228	194,303	1,279,623	328,646	66,032	3,104,511
Iron	1982	308,989	--	573,638	1,469,785	152,766	23,000	2,870,223
	1983	350,393	26,319	673,719	1,633,617	151,866	30,403	3,240,495
Isabella	1982	1,291,845	72,099	2,393,052	19,416,928	635,805	74,546	24,635,308
	1983	1,235,579	121,932	2,764,717	24,817,534	626,766	71,368	30,402,798
Jackson	1982	4,138,476	625,268	1,048,304	4,807,493	2,041,447	327,409	15,433,311
	1983	4,726,184	585,191	887,346	5,395,924	2,383,691	261,217	16,564,356
Kalamazoo	1982	6,391,984	501,553	5,608,459	3,707,816	1,819,725	435,091	22,599,855
	1983	7,103,422	1,016,305	5,796,673	4,406,113	2,168,385	400,704	24,577,547

TABLE VII-22. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1982 AND 1983 (cont.)

		Inpatient hospital						
County	Year	General hospital	Mental hospital	Skilled nursing	Intermediate care facility	Physicians	Dental	Total[a]
Kalkaska	1982	$ 316,984	$ 6,982	$ 22,629	$ 331,913	$ 181,582	$ 30,108	$ 1,121,395
	1983	377,402	2,660	61,593	292,167	180,566	37,852	1,181,518
Kent	1982	7,751,506	1,533,119	3,683,573	11,359,709	3,869,568	826,324	34,962,679
	1983	9,034,765	1,679,750	3,543,364	12,670,280	4,042,983	758,355	37,749,053
Keweenaw	1982	26,976	6,066	--	--	16,764	3,964	82,149
	1983	32,725	13,790	427	--	20,934	3,830	104,535
Lake	1982	389,513	7,797	250,071	469,455	147,766	42,625	1,615,974
	1983	500,276	12,113	358,694	705,054	144,031	46,757	2,085,682
Lapeer	1982	1,640,468	57,469	1,455,946	23,093,340	845,304	168,283	28,289,869
	1983	2,291,130	64,825	1,473,269	22,651,616	979,351	150,950	28,615,570
Leelanau	1982	137,596	2,402	175,792	570,727	71,986	10,915	1,065,511
	1983	209,749	1,671	155,480	645,325	74,541	10,743	1,199,841
Lenawee	1982	2,245,116	114,760	776,077	2,195,469	840,988	149,052	7,409,262
	1983	2,557,615	144,818	712,285	2,330,710	992,915	177,217	7,996,666
Livingston	1982	1,130,336	136,910	133,954	6,054,202	542,079	112,772	8,961,091
	1983	2,080,661	69,798	309,842	2,305,684	644,182	131,078	6,351,765
Luce	1982	306,441	19,032	--	8,905,995	103,660	19,720	9,529,401
	1983	384,097	42,307	2,520	9,631,887	133,847	16,878	10,445,526
Mackinac	1982	217,485	15,812	70,376	593,925	89,234	17,811	1,140,638
	1983	322,187	9,498	91,570	684,470	107,286	16,035	1,395,655
Macomb	1982	10,601,754	1,246,202	7,408,633	15,842,037	6,401,060	935,159	49,417,621
	1983	12,815,902	1,550,749	7,015,501	16,891,045	7,238,042	991,259	53,388,901
Manistee	1982	482,200	1,280	580,504	1,209,448	224,973	61,324	2,851,620
	1983	674,940	1,113	524,068	1,466,633	284,303	73,070	3,387,649
Marquette	1982	1,456,510	5,765	576,873	2,089,858	572,488	94,365	5,541,238
	1983	1,653,831	126,039	629,434	2,509,066	627,304	111,326	6,443,413

TABLE VII-20. NUMBER AND AMOUNT OF MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS BY TYPE OF BENEFICIARY: DECEMBER 1982 (cont.)

	Number of Beneficiaries						Amount ($1,000) of monthly benefits	
			Dependents of					
County	Retired workers	Disabled workers	Retired workers	Disabled workers	Survivors	Total[a]	Retired workers only	Total[b]
Manistee	3,238	328	473	139	819	4,997	1,350	1,926
Marquette	5,702	703	1,111	326	2,105	9,947	2,410	3,819
Mason	3,156	294	477	170	830	4,927	1,292	1,847
Mecosta	3,161	377	547	202	852	5,139	1,315	1,924
Menominee	3,083	325	663	171	1,030	5,272	1,240	1,903
Midland	4,442	474	1,114	244	1,883	8,157	2,052	3,305
Missaukee	1,144	143	257	82	319	1,945	467	704
Monroe	8,960	1,323	1,769	783	3,569	16,404	3,998	6,580
Montcalm	5,331	639	950	311	1,692	8,923	2,220	3,338
Montmorency	1,704	212	308	84	423	2,731	719	1,057
Muskegon	14,658	2,454	2,725	1,425	5,634	26,896	6,631	10,653
Newaygo	3,640	469	677	300	1,014	6,100	1,536	2,300
Oakland	74,420	7,735	13,506	3,661	30,387	129,709	36,142	56,077
Oceana	2,546	342	456	215	771	4,330	1,037	1,582
Ogemaw	2,332	412	453	244	670	4,111	958	1,521
Ontonagon	1,334	136	278	78	451	2,277	545	837
Osceola	2,413	351	467	212	762	4,205	992	1,545
Oscoda	966	137	185	84	275	1,647	390	608
Otsego	1,642	183	337	109	521	2,792	707	1,074
Ottawa	12,052	1,026	2,496	546	3,827	19,947	5,476	8,076
Presque Isle	1,868	233	482	110	614	3,307	771	1,221
Roscommon	3,873	508	688	229	763	6,061	1,648	2,370
Saginaw	17,092	2,730	4,449	1,708	7,833	33,012	7,686	13,015
St. Clair	12,237	1,283	2,279	752	4,790	21,161	5,442	8,417
St. Joseph	5,834	582	876	294	1,688	9,274	2,605	3,732

TABLE VII-22. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1982 AND 1983

		Inpatient hospital			Intermediate			
County	Year	General hospital	Mental hospital	Skilled nursing	care facility	Physicians	Dental	Total[a]
Alcona	1982	$ 269,798	$ 34,120	$ 20,570	$ 403,812	$ 102,283	$ 34,552	$1,060,917
	1983	269,571	36,009	25,018	541,178	104,530	38,903	1,230,807
Alger	1982	204,961	--	87,781	728,600	78,609	13,103	1,242,359
	1983	280,065	9,332	136,275	773,213	100,168	17,607	1,472,800
Allegan	1982	1,493,585	219,188	674,761	2,904,579	685,525	175,302	7,179,917
	1983	1,844,577	247,192	684,148	3,186,145	706,659	172,822	7,910,606
Alpena	1982	1,007,321	170,894	234,243	878,795	401,447	83,658	3,336,289
	1983	968,640	136,091	206,604	1,239,713	431,997	85,502	3,678,371
Antrim	1982	360,494	13,417	105,536	651,252	176,142	34,069	1,618,259
	1983	530,794	7,785	172,238	1,146,328	198,701	36,792	2,388,511
Arenac	1982	642,725	4,132	173,023	726,693	275,050	66,309	2,272,070
	1983	730,850	290	218,099	992,856	283,928	61,792	2,701,082
Baraga	1982	306,572	26,886	462,515	32,819	101,850	18,190	1,088,130
	1983	514,847	9,582	562,687	138,437	114,449	20,423	1,525,989
Barry	1982	925,447	83,770	499,128	1,558,907	408,064	99,308	4,193,836
	1983	968,158	106,427	583,936	1,674,816	462,565	100,139	4,531,583
Bay	1982	3,772,341	264,541	1,051,558	2,729,859	1,864,250	198,579	11,981,854
	1983	4,704,838	337,584	798,484	2,388,066	2,329,073	234,078	12,927,483
Benzie	1982	503,925	36,260	225,029	364,958	190,603	36,010	1,556,329
	1983	567,278	8,191	101,925	517,698	200,552	40,864	1,751,484
Berrien	1982	6,494,982	573,936	1,118,887	5,069,875	2,612,526	583,182	20,264,668
	1983	8,010,925	544,926	1,110,706	5,788,239	2,951,125	524,591	22,603,924
Branch	1982	1,147,228	61,550	547,552	19,963,341	436,822	124,073	23,020,008
	1983	1,695,315	75,325	548,926	22,987,828	546,167	129,111	26,642,995
Calhoun	1982	6,230,322	915,079	1,043,599	3,880,983	2,462,860	412,615	18,183,851
	1983	7,457,571	1,749,892	1,299,436	4,968,331	2,628,609	460,714	21,698,095
Cass	1982	1,533,751	61,772	431,360	1,816,264	533,873	164,393	5,358,956
	1983	1,578,520	60,407	444,151	1,870,360	574,027	160,257	5,535,443

TABLE VII-22. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1982 AND 1983 (cont.)

County	Year	Inpatient hospital		Skilled nursing	Intermediate care facility	Physicians	Dental	Total[a]
		General hospital	Mental hospital					
Mason	1982	$ 452,196	$ 12,972	$ 829,789	$ 761,438	$ 280,709	$ 77,061	$ 2,796,855
	1983	516,156	67,870	955,519	834,715	274,113	59,048	3,132,878
Mecosta	1982	789,956	21,782	373,613	618,437	330,063	85,873	21,733,625
	1983	943,144	71,116	460,680	887,569	379,429	75,288	3,335,987
Menominee	1982	457,324	19,006	33,784	763,509	199,209	29,256	1,780,916
	1983	408,520	12,866	19,554	812,266	202,339	33,614	1,826,666
Midland	1982	1,006,637	123,669	332,539	1,257,914	590,178	157,002	4,317,278
	1983	1,168,237	169,665	353,544	1,470,080	544,822	145,509	4,701,815
Missaukee	1982	337,066	74,348	113,751	27,817	131,297	41,428	909,628
	1983	308,266	16,003	76,422	46,078	115,153	33,508	769,685
Monroe	1982	2,952,365	433,692	2,377,039	2,667,080	1,718,596	181,007	12,135,425
	1983	4,008,739	279,718	2,717,348	3,193,393	1,966,848	218,714	14,204,499
Montcalm	1982	1,431,518	37,745	166,570	1,157,942	649,811	90,253	4,330,416
	1983	1,546,908	120,515	140,421	1,402,544	685,136	96,622	4,779,651
Montmorency	1982	248,844	18,115	11,399	111,638	150,681	40,402	764,311
	1983	284,905	39,570	44,614	639,202	154,578	46,596	1,414,895
Muskegon	1982	5,418,898	609,585	1,408,850	18,463,505	2,921,530	605,079	33,220,288
	1983	6,317,027	514,802	1,481,563	20,165,487	3,066,697	555,468	35,796,969
Newaygo	1982	1,124,264	30,991	1,052,312	1,015,186	506,372	130,478	4,659,696
	1983	1,022,915	55,921	985,864	1,021,224	517,211	124,151	4,507,286
Oakland	1982	16,665,805	6,049,006	5,067,585	15,386,429	9,071,005	1,427,958	64,958,350
	1983	20,453,545	5,115,916	4,983,135	17,572,475	9,837,333	1,542,480	70,751,891
Oceana	1982	712,151	17,164	637,135	640,790	333,131	979,115	2,864,271
	1983	959,675	56,469	714,182	672,224	370,773	93,103	3,342,128
Ogemaw	1982	823,437	57,633	2,053,589	1,145,587	398,851	58,213	5,122,822
	1983	790,641	43,535	1,928,292	1,377,677	432,022	60,795	5,205,765

TABLE VII-23. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER AID TO FAMILIES WITH DEPENDENT CHILDREN, EMERGENCY ASSISTANCE, GENERAL ASSISTANCE, AND FOOD STAMPS IN MICHIGAN, BY COUNTY: JANUARY 1982 AND 1983

	1982			1983		
		Payments			Payments	
County	Number of recipients	Total ($1,000)	Average per recipient	Number of recipients	Total ($1,000)	Average per recipient
Alcona	1,450	155.6	$ 107.34	1,477	190.6	$ 129.01
Alger	1,000	103.7	103.68	977	116.6	116.97
Allegan	6,490	740.0	114.02	6,734	858.4	127.48
Alpena	4,224	510.5	120.85	4,839	683.4	141.23
Antrim	1,704	171.4	100.57	1,977	234.7	118.74
Arenac	2,609	308.6	118.29	2,873	366.7	127.62
Baraga	1,136	116.3	102.41	1,581	199.9	126.45
Barry	3,957	470.9	118.46	4,500	604.3	134.29
Bay	12,701	1,702.8	134.07	15,602	2,371.1	151.97
Benzie	1,373	142.6	103.89	1,487	170.3	114.49
Berrien	26,336	3,216.4	122.13	26,304	3,557.6	135.25
Branch	4,745	548.5	115.61	4,692	670.8	142.96
Calhoun	19,200	2,526.9	131.61	22,146	3,359.1	151.68
Cass	5,956	687.6	115.45	5,496	744.4	135.45
Charlevoix	2,008	213.0	106.07	2,164	277.1	128.07
Cheboygan	2,817	282.4	100.26	3,249	371.8	114.43
Chippewa	3,554	383.0	107.76	3,890	491.1	126.25
Clare	4,234	559.3	132.11	4,910	729.0	148.46
Clinton	2,955	360.2	121.89	3,026	440.8	145.68
Crawford	1,994	194.9	97.72	2,198	268.1	121.99
Delta	3,560	393.3	110.47	4,690	603.1	128.60
Dickinson	1,928	203.9	105.74	2,160	293.1	135.71
Eaton	4,916	580.1	118.00	5,440	763.9	140.42
Emmet	2,281	213.5	93.56	2,325	261.4	112.41
Genesee	63,721	8,884.1	139.42	74,141	12,073.6	162.85
Gladwin	3,307	410.7	124.19	3,916	566.8	144.73
Gogebic	2,150	197.1	91.66	2,696	292.4	108.45
Grand Traverse	3,886	438.1	112.73	4,167	514.4	123.44
Gratiot	4,558	488.6	107.19	4,602	571.1	124.10
Hillsdale	4,859	525.6	108.17	5,481	693.6	126.55
Houghton	4,139	437.8	105.78	4,916	570.1	115.97
Huron	3,415	371.2	108.70	3,376	456.2	135.14
Ingham	28,680	3,906.9	136.22	30,587	4,706.4	153.87
Ionia	5,206	636.4	122.25	4,814	699.2	145.24
Iosco	3,457	368.2	106.51	3,416	416.2	121.84

TABLE VII-23. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER AID TO FAMILIES WITH DEPENDENT CHILDREN, EMERGENCY ASSISTANCE, GENERAL ASSISTANCE, AND FOOD STAMPS IN MICHIGAN, BY COUNTY: JANUARY 1982 AND 1983 (cont.)

County	1982			1983		
		Payments			Payments	
	Number of recipients	Total ($1,000)	Average per recipient	Number of recipients	Total ($1,000)	Average per recipient
Iron	1,591	135.4	$ 85.12	1,414	145.3	$ 102.76
Isabella	4,333	560.7	129.41	4,543	597.8	131.59
Jackson	14,491	1,922.4	132.66	16,577	2,515.1	151.72
Kalamazoo	18,912	2,472.1	130.71	21,394	3,141.1	146.82
Kalkaska	1,877	191.0	101.73	2,343	267.3	114.08
Kent	35,176	4,210.8	119.71	38,799	5,286.1	136.24
Keweenaw	259	18.4	70.90	238	23.5	98.55
Lake	2,012	217.1	107.93	2,250	301.1	133.81
Lapeer	7,122	803.5	112.82	7,312	1,013.7	138.64
Leelanau	730	63.4	86.91	733	60.9	83.08
Lenawee	8,659	1,905.8	126.55	9,502	1,391.5	146.44
Livingston	5,931	754.2	127.17	5,897	862.0	146.17
Luce	1,007	98.4	97.76	1,197	128,1	106.98
Mackinac	1,247	109.9	88.16	1,447	1,38.8	95.92
Macomb	41,792	5,573.7	133.37	40,213	6,016.8	149.62
Manistee	2,468	287.5	116.49	3,198	459.6	143.72
Marquette	5,241	643.4	122.77	7,061	915.2	129.62
Mason	2,985	293.2	98.22	3,199	400.5	125.18
Mecosta	3,128	332.2	106.21	3,438	434.6	126.41
Menominee	2,342	262.5	112.07	2,813	353.6	125.72
Midland	5,322	709.7	133.35	5,757	838.6	145.67
Missauke	1,270	138.7	109.25	11,379	168.6	122.27
Monroe	11,928	1,595.4	133.75	13,007	2,010.3	154.56
Montcalm	5,149	591.0	114.79	5,687	700.9	123.25
Montmorency	1,524	167.4	109.85	1,465	187.8	128.21
Muskegon	22,812	2,808.3	123.11	25,179	3,697.1	146.83
Newaygo	5,208	566.8	108.83	5,113	641.8	125.52
Oakland	55,509	7,713.3	138.96	62,153	9,952.3	160.13
Oceana	3,161	346.6	109.65	3,599	444.9	123.62
Ogemaw	2,942	329.7	112.06	3,446	443.2	128.63
Ontonagon	779	72.2	92.72	1,282	154.6	120.56
Osceola	2,797	277.7	99.30	2,756	352.5	127.90
Oscoda	999	112.0	112.16	1,145	147.6	128.88
Otsego	1,330	143.6	107.95	1,515	196.0	129.39
Ottawa	6,272	745.6	118.88	6,317	807.5	127.83

TABLE VII-23. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER AID TO FAMILIES WITH DEPENDENT CHILDREN, EMERGENCY ASSISTANCE, GENERAL ASSISTANCE, AND FOOD STAMPS IN MICHIGAN, BY COUNTY: JANUARY 1982 AND 1983 (cont.)

	1982			1983		
		Payments			Payments	
County	Number of recipients	Total ($1,000)	Average per recipients	Number of recipients	Total ($1,000)	Average per recipient
Presque Isle	1,359	133.4	$ 98.12	1,387	155.3	$ 111.95
Roscommon	2,463	289.5	117.52	3,153	444.4	140.95
Saginaw	31,746	4,583.9	144.39	38,105	6,275.2	164.68
St. Clair	16,056	2,257.0	140.57	17,941	2,833.3	157.92
St. Joseph	6,230	730.9	117.32	5,419	740.4	136.63
Sanilac	4,977	563.1	113.15	5,157	717.8	139.18
Schoolcraft	1,058	103.0	97.37	1,354	157.5	116.30
Shiawasse	7,267	850.8	117.08	8,203	1,217.6	148.43
Tuscola	5,868	702.5	119.72	6,328	873.4	138.02
Van Buren	10,813	1,253.8	115.95	11,320	1,401.0	123.76
Washtenaw	16,726	1,353.7	140.72	17,160	2,731.2	159.16
Wayne	441,930	68,948.3	156.02	478,776	84,755.7	177.03
Wexford	3,610	408.2	113.07	3,514	439.6	125.11
TOTAL	1,088,932	150,992.1	138.66	1,188,054	188,125.1	158.35

SOURCE: Michigan Department of Social Services, Assistance Payments Statistics (Lansing: monthly), January 1983 and January 1984, Table 2.

TABLE VII-24. TRANSFER PAYMENTS PER CAPITA AND RANKING OF MICHIGAN COUNTIES ACCORDING TO TRANSFER PAYMENTS AS A PERCENTAGE OF PERSONAL INCOME: 1982

County	Per capita	Percentage	County	Per capita	Percentage
Montmorency	305,676	38.8	Menominee	173,552	20.6
Keweenaw	295,300	38.3	Otsego	177,039	20.6
Roscommon	298,707	38.2	Huron	194,669	20.1
Lake	235,790	37.9	Hillsdale	173,853	20.1
Alcona	277,163	37.6	Ionia	158,555	20.1
Oscoda	199,157	35.7	Marquette	170,424	19.8
Ogemaw	220,893	32.6	Muskegon	182,399	19.3
Gogebic	260,082	31.5	Calhoun	201,075	18.9
Iron	265,904	30.4	Branch	171,724	18.8
Baraga	215,929	30.2	Wayne	214,715	18.6
Ontonagon	218,545	30.0	Berrien	179,067	18.3
Chippewa	215,072	29.5	Leelanau	166,210	18.3
Clare	217,037	29.5	Shiawassee	181,730	18.1
Schoolcraft	241,941	29.0	St. Clair	173,502	18.1
Gladwin	207,132	28.9	Tuscola	164,643	17.6
Alger	190,670	28.0	Lapeer	158,865	17.4
Arenac	207,780	27.7	Gratiot	163,633	17.1
Presque Isle	207,100	27.4	St. Joseph	159,827	17.0
Houghton	201,549	27.3	Lenawee	161,483	16.7
Crawford	197,667	26.9	Isabella	128,350	16.7
Luce	263,145	26.4	Bay	164,083	16.4
Missaukee	176,577	26.2	Saginaw	168,848	16.2
Osceola	183,485	26.2	Jackson	158,437	16.1
Cheboygan	206,346	26.0	Grand Traverse	169,662	16.0
Mackinac	224,676	25.7	Barry	132,270	15.9
Benzie	208,682	25.3	Cass	150,348	15.9
Manistee	211,388	25.1	Genesee	174,932	15.7
Iosco	202,131	24.7	Allegan	131,250	15.5
Oceana	182,927	24.6	Monroe	151,001	14.4
Antrim	206,533	24.3	Ingham	157,406	13.9
Alpena	206,266	24.1	Kent	145,376	13.4
Delta	204,939	24.0	Kalamazoo	142,814	12.8
Mecosta	142,149	23.6	Washtenaw	140,268	12.1
Wexford	193,339	23.3	Ottawa	123,145	12.1
Newaygo	172,815	23.1	Eaton	118,531	11.8
Mason	180,619	23.0	Livingston	109,483	11.5
Montcalm	193,697	22.5	Macomb	139,619	11.4
Charlevoix	195,061	22.4	Clinton	110,486	11.1
Kalkaska	170,423	21.7	Midland	118,108	10.6
Dickinson	219,747	21.6	Oakland	148,529	10.5
Sanilac	183,930	21.3			
Van Buren	183,742	21.2	Michigan	173,285	15.8
Emmet	196,060	20.9	United States	161,680	14.6

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VII-25. MICHIGAN COUNTIES RANKED ACCORDING TO SOCIAL SECURITY BENEFITS (OLD AGE, SURVIVORS, AND DISABILITY INSURANCE) AS A PERCENTAGE OF TOTAL PERSONAL INCOME: 1982

County	Dollar amount ($000)	As a percentage of income
Roscommon	28,971	21.3
Keweenaw	3,246	21.0
Montmorency	12,019	20.6
Alcona	14,161	19.6
Lake	8,677	17.2
Oscoda	6,642	17.0
Ogemaw	17,575	15.4
Gogebic	24,826	15.4
Iron	17,695	14.9
Clare	24,501	13.7
Gladwin	20,009	13.7
Presque Isle	14,269	13.5
Schoolcraft	9,409	13.2
Ontonagon	9,478	12.9
Arenac	14,480	12.9
Missaukee	8,938	12.8
Alger	7,874	12.7
Osceola	17,369	12.6
Houghton	34,963	12.5
Crawford	8,684	12.3
Manistee	23,107	12.2
Baraga	7,233	12.0
Mackinac	10,633	11.9
Iosco	27,855	11.8
Luce	7,269	11.8
Antrim	16,340	11.6
Chippewa	24,414	11.5
Oceana	17,969	11.0
Mason	22,524	10.8
Newaygo	28,827	10.8
Benzie	9,628	10.6
Alpena	28,682	10.5
Dickinson	26,526	10.3
Mecosta	22,722	10.2
Menominee	22,154	10.2
Cheboygan	16,693	10.1
Huron	35,492	10.1
Charlevoix	17,050	9.9
Emmet	21,598	9.9
Wexford	20,989	9.8
Sanilac	33,944	9.8
Kalkaska	8,525	9.8
Otsego	12,485	9.6
Montcalm	39,176	9.4
Van Buren	52,243	9.1
Delta	30,396	9.0
Hillsdale	32,202	9.0
Leelanau	11,418	8.8
Berrien	139,295	8.6
Muskegon	124,175	8.5
Branch	29,603	8.3
Ionia	33,106	8.1
St. Joseph	41,117	7.6
Tuscola	39,245	7.5
Gratiot	28,129	7.5
St. Clair	97,392	7.4
Lenawee	63,140	7.4
Marquette	45,719	7.3
Calhoun	108,363	7.3
Grand Traverse	43,383	7.3
Bay	84,903	7.2
Allegan	49,235	7.0
Cass	32,049	7.0
Shiawassee	48,094	6.9
Jackson	100,232	6.9
Barry	26,095	6.8
Wayne	1,733,550	6.7
Saginaw	155,304	6.7
Kent	304,205	6.2
Isabella	25,127	6.1
Ottawa	95,230	5.8
Genesee	284,510	5.8
Monroe	77,890	5.6
Kalamazoo	127,937	5.4
Lapeer	33,946	5.3
Macomb	449,715	5.3
Ingham	157,976	5.1
Midland	39,939	4.9
Oakland	668,880	4.7
Eaton	41,404	4.7
Livingston	43,705	4.6
Clinton	24,208	4.4
Washtenaw	117,663	3.9
Michigan	6,446,344	6.5
United States	53,713,000	6.0

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VII-26. MICHIGAN COUNTIES RANKED ACCORDING TO PUBLIC ASSISTANCE (WELFARE) BENEFITS AS A PERCENTAGE OF TOTAL PERSONAL INCOME: 1982

County	Dollar amount ($000)	As a percentage of income	County	Dollar amount ($000)	As a percentage of income
Lake	3,317	6.6	Presque Isle	2,214	2.1
Clare	7,569	4.2	Cass	9,589	2.1
Ogemaw	4,712	4.1	Mason	4,342	2.1
Oscoda	1,600	4.1	Antrim	2,889	2.1
Gladwin	5,820	4.0	Gratiot	7,618	2.0
Arenac	4,417	3.9	Tuscola	10,466	2.0
Alcona	2,817	3.9	Gogebic	3,231	2.0
Montmorency	2,255	3.9	Mackinac	1,767	2.0
Wayne	955,531	3.7	Iron	2,335	2.0
Crawford	2,520	3.6	Ontonagon	1,437	2.0
Osceola	4,461	3.2	Isabella	8,030	1.9
Oceana	5,176	3.2	Jackson	28,281	1.9
Van Buren	18,228	3.2	Charlevoix	3,295	1.9
Baraga	1,902	3.2	Delta	6,440	1.9
Roscommon	4,199	3.1	Shiawassee	13,213	1.9
Kalkaska	2,621	3.0	St. Joseph	10,178	1.9
Newaygo	8,005	3.0	Lenawee	16,222	1.9
Chippewa	6,246	2.9	Lapeer	12,007	1.9
Missaukee	2,056	2.9	Menominee	4,014	1.8
Berrien	46,759	2.9	Otsego	2,390	1.8
Saginaw	66,011	2.8	Ingham	55,981	1.8
Luce	1,752	2.8	Barry	6,943	1.8
Muskegon	41,274	2.8	Huron	6,210	1.8
Alger	1,708	2.8	Allegan	11,139	1.6
Wexford	5,868	2.8	Monroe	22,047	1.6
Schoolcraft	1,891	2.7	Emmet	3,412	1.6
Genesee	129,596	2.7	Kalamazoo	37,185	1.6
Alpena	7,219	2.6	Marquette	9,686	1.5
Houghton	7,195	2.6	Dickinson	3,406	1.3
Benzie	2,324	2.6	Kent	64,260	1.3
Cheboygan	4,169	2.5	Grand Traverse	7,281	1.2
Calhoun	37,357	2.5	Midland	9,957	1.2
Sanilac	8,393	2.4	Washtenaw	35,066	1.2
St. Clair	31,097	2.4	Livingston	10,489	1.1
Manistee	4,420	2.3	Eaton	8,779	1.0
Mecosta	5,103	2.3	Macomb	79,844	0.9
Montcalm	9,525	2.3	Clinton	5,112	0.9
Branch	8,082	2.3	Oakland	113,779	0.8
Ionia	9,169	2.2	Leelanau	1,042	0.8
Hillsdale	7,806	2.2	Ottawa	11,376	0.7
Keweenaw	330	2.1			
Bay	24,870	2.1	Michigan	2,163,294	2.2
Iosco	4,972	2.1	United States	35,760,000	1.4

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE VII-27. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER THE SUPPLEMENTAL SECURITY INCOME PROGRAM IN MICHIGAN, BY COUNTY: 1982 AND 1983

	Average monthly					
	1982			1983		
		Payments			Payments	
County	Number of recipients	Total ($000)	Per recipient	Number of recipients	Total ($000)	Per recipient
Alcona	164	$26.2	$159.65	151	$26.2	$173.68
Alger	190	36.4	191.34	185	38.4	207.31
Allegan	802	146.0	181.98	774	151.4	195.61
Alpena	431	74.8	173.52	437	79.6	182.06
Antrim	257	48.3	187.77	237	47.6	200.70
Arenac	268	54.2	202.18	258	55.0	213.33
Baraga	202	30.5	151.16	196	32.6	166.36
Barry	365	68.2	186.98	363	71.0	195.48
Bay	1,215	235.4	193.72	1,193	243.7	204.31
Benzie	177	36.6	206.98	178	38.0	213.34
Berrien	2,813	520.7	185.11	2,774	550.6	198.47
Branch	646	80.3	124.36	622	87.0	139.91
Calhoun	2,141	437.1	204.16	2,082	451.7	216.95
Cass	534	91.0	170.45	524	97.3	185.63
Charlevoix	255	42.6	167.21	241	41.8	173.31
Cheboygan	304	52.5	172.60	283	53.3	188.19
Chippewa	580	110.6	190.67	552	114.9	208.16
Clare	340	62.6	184.06	372	75.7	203.59
Clinton	232	40.9	176.31	225	41.0	182.42
Crawford	91	15.0	164.35	92	16.3	177.24
Delta	654	109.3	167.16	635	114.5	180.30
Dickinson	326	44.5	136.56	298	45.5	152.53
Eaton	510	101.9	199.84	495	104.9	211.92
Emmet	285	50.1	175.87	280	53.2	190.11
Genesee	5,204	1,075.3	206.64	5,224	1,145.5	219.28
Gladwin	291	56.5	194.11	282	59.0	209.38
Gogebic	411	64.1	155.99	404	67.0	165.93
Grand Traverse	742	156.4	210.78	712	155.3	218.13
Gratiot	618	115.0	186.15	615	122.9	199.96
Hillsdale	496	100.2	201.98	496	106.5	214.80
Houghton	741	121.9	164.55	699	123.7	176.96
Huron	557	110.6	198.56	524	111.3	212.39
Ingham	2,681	536.8	200.22	2,652	566.3	213.55
Ionia	554	103.3	186.55	533	110.2	206.78
Iosco	261	43.7	167.62	249	44.9	180.15

TABLE VII-22. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1982 AND 1983 (cont.)

County	Year	Inpatient hospital General hospital	Inpatient hospital Mental hospital	Skilled nursing	Intermediate care facility	Physicians	Dental	Total[a]
Ontonagon	1982	$ 296,172	$ 9,132	$ 411,530	$ 549,322	$ 93,276	$ 16,215	$ 1,528,390
	1983	432,833	14,857	595,672	666,456	103,369	11,714	1,985,404
Osceola	1982	802,462	17,006	160,632	528,104	236,668	58,518	2,157,642
	1983	796,452	21,740	151,332	576,256	276,154	65,385	2,253,112
Oscoda	1982	212,105	4,966	76,243	357,574	94,966	24,442	910,970
	1983	271,928	34,998	46,461	377,611	109,884	17,326	993,934
Otesgo	1982	354,334	34,111	119,058	5,886,881	208,560	33,131	6,911,208
	1983	478,500	42,802	136,600	4,091,560	243,665	29,807	5,282,967
Ottawa	1982	1,284,760	351,328	956,424	4,460,428	706,677	165,635	9,004,079
	1983	1,542,932	265,336	780,219	5,156,943	782,057	158,970	9,797,771
Presque Isle	1982	306,418	27,896	147,319	629,515	129,624	26,032	1,470,429
	1983	456,298	38,693	101,168	1,150,240	156,411	23,621	2,164,788
Roscommon	1982	502,036	14,907	65,858	452,370	265,866	38,949	1,748,125
	1983	609,884	19,490	37,410	535,027	228,093	49,168	1,879,840
Saginaw	1982	7,677,632	454,000	1,124,021	6,581,009	3,719,254	676,379	24,344,445
	1983	9,752,259	702,885	1,435,268	7,124,994	4,016,717	698,805	27,943,423
St. Clair	1982	3,425,865	413,051	796,529	2,091,902	2,040,130	502,724	11,402,961
	1983	4,119,981	371,134	813,904	3,056,320	2,330,632	570,072	13,369,772
St. Joseph	1982	1,298,553	64,837	359,279	2,459,064	568,063	119,701	5,746,649
	1983	1,940,556	35,262	400,852	2,485,093	606,573	112,606	6,539,285
Sanilac	1982	936,471	40,140	506,031	1,140,386	455,057	111,419	3,829,174
	1983	1,388,736	116,805	609,578	1,183,988	576,975	134,044	4,725,868
Schoolcraft	1982	212,856	3,408	278,488	688,699	90,725	21,450	1,449,683
	1983	350,654	1,262	172,873	724,318	119,545	17,584	1,569,322

TABLE VII-22. PAYMENTS BY STATE OF MICHIGAN TO VENDORS PROVIDING MEDICAL ASSISTANCE (MEDICAID), BY SELECTED TYPE OF SERVICE AND BY COUNTY, FISCAL YEARS: 1982 AND 1983 (cont.)

County	Year	Inpatient hospital General hospital	Inpatient hospital Mental hospital	Skilled nursing	Intermediate care facility	Physicians	Dental	Total[a]
Shiawassee	1982	$ 1,295,656	$ 101,340	$ 999,458	$ 1,602,011	$ 756,127	$ 127,827	$ 5,773,585
	1983	1,099,113	80,241	1,220,216	1,921,357	907,847	157,765	7,187,143
Tuscola	1982	1,369,348	79,293	1,091,292	14,857,126	647,718	115,247	18,970,883
	1983	1,576,276	75,455	1,333,718	13,648,811	669,823	136,365	18,333,659
Van Buren	1982	3,672,200	230,689	648,162	2,136,177	1,192,666	320,162	10,033,046
	1983	3,854,103	365,919	673,709	2,406,304	1,304,194	260,332	10,640,807
Washtenaw	1982	5,487,999	1,237,592	892,569	4,082,315	2,472,412	305,156	17,472,809
	1983	7,026,400	1,150,611	654,539	4,726,199	2,687,210	320,136	19,503,826
Wayne	1982	184,792,486	25,817,770	24,762,882	116,658,795	75,450,580	9,539,334	529,732,470
	1983	239,178,698	30,094,791	25,602,487	116,110,553	76,333,118	10,445,634	583,943,742
Wexford	1982	1,313,086	35,370	1,012,780	482,980	376,801	107,544	3,845,076
	1983	1,144,524	8,314	641,646	1,040,229	406,295	112,299	3,868,640
MICHIGAN	1982	439,257,256	51,622,990	96,454,438	417,593,345	163,609,509	25,006,963	1,383,978,586
	1983	349,897,912	46,398,902	95,321,213	390,450,917	154,467,007	23,644,447	1,256,596,290

SOURCE: Michigan Department of Social Services, Medical Assistance (Medicaid) Fiscal Year 1982 (Lansing: 1982 and 1983) Table 9.

[a] Totals for 1982 exclude gross adjustment of $119,605,124, buy-in expenditures of $9,096,447, HMO expenditures of $45,495,764, and screening costs of $6,041,643. Totals for 1983 exclude gross adjustments of $43,949,466, accounting adjustments of $117,660, buy-in expenditures of $9,709,932, HMO expenditures of $49,756,835 and screening costs of $5,490,931.

TABLE VII-27. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER THE SUPPLEMENTAL SECURITY INCOME PROGRAM IN MICHIGAN, BY COUNTY: 1982 AND 1983 (cont.)

County	Average monthly					
	1982			1983		
		Payments			Payments	
	Number of recipients	Total ($000)	Per recipient	Number of recipients	Total ($000)	Per recipient
Iron	324	$49.4	$152.54	299	$48.7	$162.87
Isabella	773	100.9	130.54	745	105.7	141.89
Jackson	1,543	303.4	196.65	1,562	326.2	208.82
Kalamazoo	2,255	439.4	194.83	2,242	466.1	207.88
Kalkaska	167	33.2	198.85	169	36.3	215.01
Kent	4,747	922.4	194.31	4,771	983.5	206.14
Keweenaw	38	5.2	136.82	34	5.0	146.85
Lake	270	41.0	151.95	255	41.1	161.16
Lapeer	850	142.1	167.20	817	145.7	178.29
Leelanau	92	14.0	151.97	79	12.4	157.50
Lenawee	945	18.3	196.13	924	193.5	209.37
Livingston	508	84.2	165.73	397	80.9	203.67
Luce	301	45.4	150.89	276	43.5	157.48
Mackinac	194	30.5	157.03	188	32.1	170.87
Macomb	3,831	717.4	187.27	3,796	756.3	199.23
Manistee	244	38.3	156.84	229	40.9	178.56
Marquette	698	120.6	172.84	667	124.8	187.18
Mason	338	56.0	165.73	309	56.6	183.25
Mecosta	382	70.4	184.25	373	73.6	197.44
Menominee	336	50.3	149.79	319	50.5	158.36
Midland	506	100.4	198.44	492	105.2	213.83
Missaukee	151	29.1	192.94	138	28.2	204.47
Monroe	923	157.3	170.41	910	170.6	187.44
Montcalm	754	151.1	200.42	728	151.1	207.66
Montmorency	125	18.1	145.15	130	18.9	145.63
Muskegon	2,504	450.9	180.10	2,450	465.6	190.05
Newaygo	506	83.9	165.72	474	83.9	177.04
Oakland	5,700	1,134.0	198.95	5,788	1,235.4	213.43
Oceana	310	52.3	168.80	293	52.7	179.76
Ogemaw	369	49.9	135.28	349	51.9	148.61
Ontonagon	200	33.8	169.06	193	34.1	176.76
Osceola	361	69.9	193.55	355	72.7	204.65
Oscoda	96	15.1	157.15	85	13.9	163.36
Otsego	232	45.0	193.97	201	46.7	232.46
Ottawa	757	150.0	198.14	760	159.1	209.33

TABLE VII-27. TOTAL NUMBER OF RECIPIENTS AND EXPENDITURES UNDER THE SUPPLEMENTAL SECURITY INCOME PROGRAM IN MICHIGAN, BY COUNTY: 1982 AND 1983 (cont.)

	Average monthly					
	1982			1983		
		Payments			Payments	
County	Number of recipients	Total ($000)	Per recipient	Number of recipients	Total ($000)	Per recipient
Presque Isle	299	$52.3	$174.89	279	$52.1	$186.75
Roscommon	237	43.4	183.13	221	44.6	201.93
Saginaw	2,747	576.2	209.74	2,688	599.9	223.17
St. Clair	1,325	244.7	184.66	1,298	258.7	199.31
St. Joseph	559	104.2	186.46	546	108.4	198.56
Sanilac	488	105.3	215.76	470	104.6	222.60
Schoolcraft	233	46.9	201.09	224	49.2	219.50
Shiawassee	679	135.0	198.88	658	139.5	211.96
Tuscola	826	132.9	160.84	787	135.6	172.34
Van Buren	1,147	218.1	190.15	1,103	228.3	207.01
Washtenaw	1,857	392.2	211.18	1,857	420.8	226.63
Wayne	39,413	7,597.8	192.77	38,431	7,959.9	207.12
Wexford	434	76.7	176.74	416	76.8	184.60
TOTAL	108,907	20,715.6	190.21	106,612	21,735.8	203.88

SOURCE: Michigan Department of Social Services, Program Statistics (Lansing: annually), 1982 and 1983.

NOTE: Social Security Income comprises programs formerly under aid to the blind, aid to the aged, and aid to the disabled. The dollar amounts indicated include the federal payment as well as state supplementation.

TABLE VII-28. NUMBER AND PERCENTAGE OF MICHIGAN HOUSEHOLDS WITH SOCIAL SECURITY INCOME AND WITH PUBLIC ASSISTANCE INCOME, BY COUNTY: CENSUS 1980

	Social Security		Public Assistance	
County	Number	Percentage	Number	Percentage
Alcona	1,628	43.6	334	8.9
Alger	1,049	32.0	264	8.0
Allegan	6,874	25.1	2,011	7.3
Alpena	3,222	28.8	1,140	10.2
Antrim	1,926	33.5	388	6.7
Arenac	1,733	34.0	581	11.4
Baraga	1,165	39.7	314	10.7
Barry	4,086	26.6	1,104	7.1
Bay	10,840	26.2	3,941	9.5
Benzie	1,340	33.3	294	7.3
Berrien	16,094	26.5	7,076	11.6
Branch	3,981	28.3	1,125	8.0
Calhoun	13,464	26.3	5,139	10.0
Cass	4,823	28.0	1,617	9.3
Charlevoix	2,039	28.7	453	6.3
Cheboygan	2,434	33.2	585	7.9
Chippewa	3,067	30.5	1,085	10.8
Clare	3,397	39.2	1,011	11.6
Clinton	3,691	20.7	926	5.2
Crawford	1,107	32.8	278	8.2
Delta	4,260	31.5	1,089	8.0
Dickinson	3,334	34.8	663	6.9
Eaton	5,825	19.3	1,575	5.2
Emmet	2,285	28.2	494	6.1
Genesee	33,874	21.8	17,175	11.0
Gladwin	2,649	37.0	858	12.0
Gogebic	3,423	44.7	714	9.3
Grand Traverse	4,647	24.1	1,255	6.5
Gratiot	3,563	26.7	1,138	8.5
Hillsdale	4,198	29.2	1,196	8.3
Houghton	5,211	40.0	1,320	10.1
Huron	4,416	34.5	929	7.2
Ingham	18,633	19.5	8,308	8.7
Ionia	4,347	26.8	1,374	8.4
Iosco	3,298	32.2	759	7.4

TABLE VII-28. NUMBER AND PERCENTAGE OF MICHIGAN HOUSEHOLDS WITH SOCIAL SECURITY INCOME AND WITH PUBLIC ASSISTANCE INCOME, BY COUNTY: CENSUS 1980 (cont.)

County	Social Security		Public Assistance	
	Number	Percentage	Number	Percentage
Iron	2,412	44.3	430	7.9
Isabella	3,898	24.2	1,256	7.8
Jackson	13,174	25.8	4,451	8.7
Kalamazoo	15,735	20.9	5,796	7.6
Kalkaska	1,131	29.8	353	9.3
Kent	35,742	22.9	11,503	7.3
Keweenaw	452	55.1	84	10.2
Lake	1,475	48.4	492	16.1
Lapeer	4,522	21.3	1,577	7.4
Leelanau	1,468	29.2	184	3.6
Lenawee	7,790	25.7	2,397	7.9
Livingston	5,980	19.1	1,662	5.3
Luce	744	33.5	186	8.3
Mackinac	1,328	36.0	363	9.8
Macomb	48,096	20.9	12,619	5.4
Manistee	3,036	35.5	884	10.3
Marquette	5,817	23.6	1,595	6.4
Mason	3,240	33.0	706	7.2
Mecosta	3,280	29.1	910	8.0
Menominee	3,076	33.1	696	7.4
Midland	4,565	18.6	1,816	7.4
Missaukee	1,208	34.9	338	9.7
Monroe	9,899	22.8	3,516	8.1
Montcalm	5,021	30.3	1,551	9.3
Montmorency	1,156	41.1	252	8.9
Muskegon	15,420	28.2	6,391	11.7
Newaygo	3,916	32.0	1,305	10.6
Oakland	73,682	20.6	17,436	4.8
Oceana	2,388	32.0	799	10.7
Ogemaw	2,267	37.9	608	10.1
Ontonagon	1,332	37.3	306	8.5
Osceola	2,165	33.1	684	10.4
Oscoda	1,043	40.8	194	7.5
Otsego	1,395	28.3	292	5.9
Ottawa	10,682	21.1	2,135	4.2

TABLE VII-28. NUMBER AND PERCENTAGE OF MICHIGAN HOUSEHOLDS WITH SOCIAL SECURITY INCOME AND WITH PUBLIC ASSISTANCE INCOME, BY COUNTY: CENSUS 1980 (cont.)

	Social Security		Public Assistance	
County	Number	Percentage	Number	Percentage
Presque Isle	1,885	37.4	404	8.0
Roscommon	2,889	44.0	582	8.8
Saginaw	18,423	24.1	9,100	11.9
St. Clair	12,759	26.9	4,649	9.8
St. Joseph	5,651	28.6	1,586	8.0
Sanilac	4,710	33.7	1,179	8.4
Schoolcraft	1,139	37.0	300	9.7
Shiawassee	5,643	24.1	1,870	7.9
Tuscola	4,683	25.6	1,560	8.5
Van Buren	6,802	29.4	2,895	12.5
Washtenaw	14,637	15.6	5,249	5.6
Wayne	215,417	26.1	117,733	14.2
Wexford	2,689	29.7	919	10.1
MICHIGAN	787,785	24.6	302,306	9.4

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF3, computer tape.

Note: Income data pertain to the year 1979.

VIII. LAW ENFORCEMENT AND THE COURTS

The Michigan Department of State Police compiles data on criminal offenses, arrests, and stolen property within the state of Michigan. It publishes this data in the monthly Uniform Crime Report Bulletin a semiannual crime summary, and the annual Uniform Crime Report, which is usually published in the spring. From 1959 through 1970, the information now contained in the Uniform Crime Report was found in the Department of State Police's Michigan Law Enforcement Officials Report on Crime. Michigan began collecting such data in 1959.

National data on crime and comparisons with other states are found in the Federal Bureau of Investigation's Uniform Crime Report for the United States.

The Michigan Department of State Police collects data from its units in the field, county sheriff departments, and other police units of local governments. Its statistics are more comprehensive than those published in the federal Uniform Crime Report, especially since less is now being published in that document. The tables that follow present considerable information not included in this year's federal Uniform Crime Report. For additional information, the Uniform Reporting Section of the Michigan Department of State Police should be contacted.

The Federal Bureau of Investigation divides crimes into two categories: Index Offenses and Nonindex Offenses. The crime rate is the total index crime per 100,000 population. Crimes classified as index offenses are usually more serious and/or are based on data with a high degree of interpreting and reporting reliability. Index Offenses are murder and nonnegligent manslaughter; rape; robbery in the form of stealing from a person; aggravated assault; burglary, which is any unlawful entry to commit a felony or theft; larceny, which is theft excluding motor vehicle theft (listed separately) and does not include con games, embezzlement, or fraud; and motor vehicle theft (the term has been used interchangeably with auto theft), which includes all cases in which a motor vehicle is stolen or driven away. All other offenses are classified under Nonindex Offenses. Sex offenses which do not include rape or prostitution and commercialized vice are listed separately. Offenses against family and children include nonsupport, desertion, neglect, and abuse. The term "liquor laws" as used here includes all violations of the liquor laws except driving under the influence and drunkenness, which are listed separately.

Offenses are crimes committed; arrests refer to the number of individuals taken into custody and formally charged with violation of the law. An offense is cleared by arrest when at least one person is arrested, charged, and given to the court for prosecution. Data concerning offenses include attempts to commit a crime whether or not successfully executed. It might be noted that perhaps one-half of all crime goes unreported.

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TABLE VIII-1. CRIMINAL OFFENSES IN MICHIGAN BY TYPE IN THE CRIME INDEX: 1963-1982

Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny and theft	Motor vehicle theft	Total crime index
1963	242	940	6,301	7,370	44,086	125,573	17,014	201,526
1964	250	1,217	6,766	8,650	45,871	129,791	21,172	213,717
1965	344	1,407	7,881	10,341	55,017	133,516	24,208	232,714
1966	365	1,844	12,423	10,641	72,333	153,895	27,612	279,113
1967	517	1,848	16,071	12,826	91,264	173,095	33,415	329,036
1968	614	2,105	17,608	13,802	88,234	167,783	34,732	324,878
1969	726	2,231	22,880	15,080	104,177	201,466	41,594	388,154
1970	831	2,402	30,758	17,099	139,398	253,258	41,184	484,930
1971	938	2,405	29,698	18,647	151,357	264,980	44,720	512,745
1972	964	2,652	26,248	20,440	143,034	248,201	42,890	484,429
1973	1,163	3,166	25,521	23,001	142,304	247,785	49,234	492,092
1974	1,170	3,370	30,657	24,739	172,828	302,301	56,599	591,664
1975	1,042	3,477	32,354	25,751	173,134	327,367	59,755	622,880
1976	1,001	3,281	30,241	24,154	151,207	321,192	55,688	586,764
1977	853	3,537	23,834	24,828	138,299	285,432	49,539	532,011
1978	862	3,614	20,192	28,661	130,716	279,261	47,995	511,301
1979	810	4,085	20,168	31,261	138,074	312,643	55,142	562,183
1980	941	4,267	22,363	30,760	158,944	337,609	53,562	608,446
1981	863	4,353	23,644	29,970	170,372	339,676	58,213	635,903
1982	870	4,083	24,470	28,952	162,457	326,283	61,252	615,423

SOURCE: Michigan Department of State Police, 1982 Uniform Crime Report (East Lansing: annually); and Michigan Law Enforcement Officials Report on Crime, 1968 through 1970 (East Lansing: annually), and special release.

TABLE VIII-2. INDEX OF CRIMINAL OFFENSES PER 100,000 INHABITANTS IN MICHIGAN: 1963-1982

Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny and theft	Motor vehicle theft	Total crime index
1963	3.0	11.7	78.2	91.5	547.1	1,558.4	211.1	2,500.9
1964	3.1	14.9	82.6	105.7	560.3	1,585.3	258.6	2,610.4
1965	4.1	16.8	94.3	123.7	658.3	1,597.7	289.7	2,784.7
1966	4.3	21.7	145.0	125.0	849.8	1,808.0	324.4	3,279.0
1967	6.0	21.4	186.2	148.6	1,057.5	2,005.7	387.2	3,812.7
1968	7.1	24.2	202.5	158.7	1,014.7	1,929.4	399.4	3,736.0
1969	8.3	25.4	260.6	171.7	1,186.4	2,294.3	473.7	4,420.4
1970	9.3	27.0	345.6	192.1	1,566.1	2,845.3	462.7	5,448.0
1971	10.4	26.7	330.1	207.3	1,682.5	2,945.5	497.1	5,699.7
1972	10.7	29.4	291.2	226.8	1,587.0	2,753.8	475.9	5,374.8
1973	11.9	34.9	281.7	253.9	1,570.5	2,734.6	543.4	5,430.9
1974	12.8	37.0	336.3	271.4	1,895.7	3,315.8	620.8	6,489.7
1975	11.4	38.0	353.3	281.2	1,890.7	3,575.1	652.6	6,802.2
1976	11.2	36.0	332.2	265.3	1,660.9	3,528.0	611.7	6,445.1
1977	9.3	38.7	261.1	272.0	1,514.9	3,126.7	542.7	5,765.4
1978	9.9	39.3	219.7	311.9	1,422.5	3,039.1	522.3	5,564.3
1979	8.8	44.4	219.1	339.5	1,499.7	3,395.7	598.9	6,106.0
1980	10.2	46.2	242.1	332.9	1,720.4	3,654.3	579.8	6,585.9
1981	9.0	47.0	255.0	324.0	1,840.0	3,669.0	629.0	6,773.0
1982	9.4	44.2	264.9	313.4	1,758.5	3,531.8	663.0	6,661.6

SOURCE: Michigan Department of State Police, Uniform Crime Report, 1971 through 1982 (East Lansing: annually), pp. 9-24; and Michigan Law Enforcement Officials Report on Crime, 1963 through 1970 (East Lansing: annually), and special release.

NOTE: The Bureau of the Census indicates the 1980 Michigan population to be 9,238,344.

TABLE VIII-3. INDEX OF CRIMINAL OFFENSES PER 100,000 INHABITANTS IN THE UNITED STATES: 1963-1982

Year	Murder and nonnegligent manslaughter	Forcible rape	Robbery	Aggravated assault	Burglary	Larceny and theft	Motor vehicle theft	Total crime index
1963	4.6	9.3	61.6	91.7	572.9	1,211.0	215.9	2,167.0
1964	4.9	11.2	68.0	105.4	630.9	1,306.8	246.5	2,373.7
1965	5.1	12.1	71.5	110.4	658.7	1,320.5	255.9	2,434.2
1966	5.6	13.2	80.6	119.4	716.6	1,433.4	286.0	2,654.7
1967	6.2	13.9	102.5	129.2	821.5	1,565.4	333.0	2,971.8
1968	6.9	15.8	131.5	142.7	926.6	1,735.1	391.7	3,350.2
1969	7.3	18.4	148.0	153.3	978.2	1,918.2	434.8	3,658.1
1970	7.8	18.6	171.7	163.6	1,078.4	2,065.5	455.3	3,960.9
1971	8.6	20.4	187.5	177.5	1,156.4	2,131.3	458.3	4,140.0
1972	9.0	22.5	180.7	188.8	1,140.8	1,993.6	426.1	3,961.4
1973	9.4	24.5	183.1	200.5	1,222.5	2,071.9	442.6	4,154.4
1974	9.8	26.2	209.3	215.8	1,437.7	2,489.5	462.2	4,850.4
1975	9.6	26.3	218.2	227.4	1,525.9	2,804.8	469.4	5,281.7
1976	8.8	26.4	195.8	228.7	1,439.5	2,921.3	446.1	6,266.4
1977	8.8	29.1	187.1	241.5	1,410.9	2,729.9	447.6	5,055.1
1978	9.0	30.8	191.3	255.9	1,423.7	2,743.9	454.7	5,109.3
1979	9.7	34.5	212.1	279.1	1,499.1	2,988.4	498.5	5,521.5
1980	10.2	36.4	243.5	290.6	1,668.2	3,156.3	494.6	5,899.9
1981	9.8	35.6	250.6	280.9	1,632.1	3,122.3	468.7	5,799.9
1982	9.1	33.6	231.9	280.8	1,475.2	3,069.8	452.8	5,553.1

SOURCE: Federal Bureau of Investigation, Uniform Crime Reports for the United States (Washington, D.C.: annually) Table 1.

NOTE: Populations are the Bureau of Census provisional estimates as of July 1, except April 1, 1970 and 1980, preliminary census counts, and are subject to change.

TABLE VIII-4. SELECTED NON-INDEX CRIME OFFENSES IN MICHIGAN, BY TYPE: 1976-1982

Offenses	1976	1977	1978	1979	1980	1981	1982
Arson[a]	5,412	5,641	5,728	7,745	7,077	8,812	7,056
Non-aggravated assault	43,810	46,126	53,029	58,478	59,648	58,881	60,227
Weapons	10,918	8,773	7,004	7,192	6,952	6,329	5,444
Driving under the influence	30,488	32,842	36,776	45,076	47,661	51,390	47,035
All other crimes	446,934	452,721	470,932	470,392	513,385	488,343	426,214
Total non-index crimes	537,562	546,103	573,469	573,469	634,723	613,755	545,976

SOURCE: Michigan Department of State Police, Uniform Crime Report (East Lansing: annually).

a. As of 1979, arson was officially classified as an index crime. However, for purposes of this table, it is grouped with non-index crime offenses.

TABLE VIII-5. SELECTED NON-INDEX CRIME OFFENSES PER 100,000 INHABITANTS IN MICHIGAN: 1976-1982

Offenses	1976	1977	1978	1979	1980	1981	1982
Arson	59.4	61.8	62.4	96.7	76.6	95.2	76.2
Non-aggravated assault	481.2	505.3	578.0	635.1	645.6	636.0	650.5
Weapons (possession, etc.)	119.9	108.4	76.3	78.1	75.2	69.0	58.8
Driving under the influence	340.4	350.3	400.8	489.6	515.9	555.1	508.0
Other	1,457.8	1,192.0	625.3	n.a.	5,556.9	5,274.6	4,603.6
TOTAL	5,906.8	5,985.6	6,245.9	6,879.0	6,870.3	6,629.2	5,897.1

SOURCE: Michigan Department of State Police, Uniform Crime Report (East Lansing: annually).

NOTE: Michigan population, as determined in 1980 by the Bureau of the Census, is 9,258,344.

n.a.: Data not available.

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1980-1982

		Index crimes							
County	Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Alcona	1980	1	0	1	15	332	309	9	340
	1981	1	8	1	22	268	298	8	344
	1982[a]	0	1	1	11	169	225	9	259
Alger	1980	0	0	4	14	126	193	15	572
	1981	0	0	4	15	151	187	16	561
	1982	1	0	4	14	112	158	8	460
Allegan	1980	2	22	38	113	852	1,568	146	4,967
	1981	1	30	32	130	600	1,444	118	4,896
	1982[a]	2	51	28	163	754	1,573	83	5,686
Alpena	1980	0	8	5	41	264	860	40	1,312
	1981	0	9	8	39	278	845	51	1,478
	1982[a]	0	8	4	39	209	719	27	1,319
Antrim	1980	0	4	0	13	310	385	20	860
	1981	0	2	2	8	201	393	18	715
	1982[a]	2	4	3	8	154	306	16	568
Arenac	1980	0	1	3	19	208	323	27	623
	1981	0	7	7	40	203	312	24	698
	1982	1	8	2	26	205	253	21	535
Baraga	1980	0	0	5	21	81	91	12	460
	1981	0	1	0	20	94	123	19	401
	1982[a]	0	3	1	13	93	109	14	365
Barry	1980	0	10	22	93	515	1,055	56	2,857
	1981	1	17	9	68	423	932	47	2,354
	1982[a]	3	18	13	54	435	832	59	1,923
Bay	1980	1	39	59	254	1,355	4,489	220	8,700
	1981	2	28	52	189	1,403	4,024	239	7,322
	1982[a]	0	41	26	153	1,062	4,174	192	6,743
Benzie	1980	0	6	5	24	237	492	34	1,323
	1981	0	0	5	27	132	391	17	1,288
	1982[a]	1	11	1	14	129	324	4	535
Berrien	1980	10	102	316	835	3,645	8,958	547	20,787
	1981	15	107	303	808	3,063	7,879	407	18,653
	1982[a]	13	90	239	874	3,005	7,619	333	15,689

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1980-1982 (cont.)

		Index crimes							
County	Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Branch	1980	0	6	12	54	323	1,277	49	2,346
	1981	0	7	5	50	369	1,198	44	2,329
	1982[a]	0	9	6	41	331	1,096	25	1,601
Calhoun	1980	13	53	226	463	2,267	5,165	302	10,080
	1981	11	74	201	499	2,418	5,447	277	9,125
	1982[a]	10	37	177	439	2,488	5,470	244	7,752
Cass	1980	5	20	16	162	698	1,557	95	3,443
	1981	1	17	17	163	689	1,608	84	2,996
	1982	2	14	9	130	603	1,445	63	2,218
Charlevoix	1980	0	9	3	31	366	746	42	1,311
	1981	0	3	2	23	316	661	35	1,532
	1982[a]	0	10	8	25	187	580	21	1,113
Cheboygan	1980	0	3	2	40	400	621	40	1,622
	1981	2	4	6	28	383	655	34	1,515
	1982	0	2	2	30	312	563	28	1,248
Chippewa	1980	1	5	19	51	395	1,102	94	2,497
	1981	4	13	6	112	442	1,094	78	3,664
	1982	1	7	211	135	397	956	61	2,341
Clare	1980	0	13	7	46	744	1,134	42	2,674
	1981	0	10	6	44	885	1,027	48	1,881
	1982[a]	8	9	7	46	619	737	31	1,504
Clinton	1980	1	10	16	49	269	920	55	1,750
	1981	1	19	11	42	329	929	59	1,673
	1982[a]	0	9	9	44	329	808	47	1,684
Crawford	1980	0	4	2	14	362	398	22	924
	1981	1	4	2	24	306	523	21	740
	1982[a]	0	5	2	20	287	480	18	547
Delta	1980	1	3	3	46	402	975	51	1,815
	1981	1	4	0	32	412	1,007	54	1,984
	1982	1	10	1	28	340	972	42	1,704
Dickinson	1980	0	3	3	14	163	480	31	1,094
	1981	1	3	7	18	158	570	30	1,005
	1982	0	0	5	24	152	456	29	773

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1980-1982 (cont.)

		Index crimes							
County	Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Eaton	1980	5	33	58	64	567	2,193	148	3,262
	1981	1	17	30	87	571	2,256	111	3,267
	1982[a]	0	17	24	117	507	2,171	113	2,986
Emmet	1980	1	8	8	40	283	672	45	3,152
	1981	0	2	9	31	310	656	56	3,183
	1982	3	7	6	33	210	837	25	3,829
Genesee	1980	45	264	991	2,814	10,074	21,153	1,778	25,711
	1981	40	273	1,165	2,993	12,230	21,929	1,684	23,441
	1982[a]	44	263	1,046	2,840	11,109	20,785	1,533	22,354
Gladwin	1980	0	4	6	19	415	519	27	1,240
	1981	0	8	6	29	369	516	36	993
	1982	2	1	1	28	281	474	24	894
Gogebic	1980	0	5	9	20	170	417	72	1,696
	1981	0	2	1	29	174	404	41	2,219
	1982[a]	0	3	5	34	140	403	25	1,517
Grand Traverse	1980	0	14	24	64	726	2,116	139	4,290
	1981	0	14	16	56	679	1,925	91	4,281
	1982	1	30	19	50	454	1,640	89	3,317
Gratiot	1980	0	9	19	44	343	894	47	2,021
	1981	0	4	8	28	327	774	40	1,936
	1982	2	9	2	20	232	686	36	1,876
Hillsdale	1980	3	9	32	62	651	1,159	63	3,602
	1981	3	4	8	74	574	993	53	3,467
	1982[a]	0	8	6	76	410	817	46	1,958
Houghton	1980	0	7	4	49	182	547	33	1,243
	1981	0	4	6	34	237	588	38	1,327
	1982	0	3	5	27	180	446	32	1,085
Huron	1980	0	10	5	39	424	812	52	3,359
	1981	0	3	1	45	334	764	41	2,854
	1982[a]	0	12	2	25	295	644	21	2,099
Ingham	1980	7	100	295	708	4,305	12,570	707	19,358
	1981	13	161	217	843	4,541	13,000	556	18,612
	1982[a]	9	228	334	757	5,012	12,282	603	17,577

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1980-1982 (cont.)

		Index crimes							
County	Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Ionia	1980	3	13	27	120	491	1,374	84	3,285
	1981	2	15	23	142	502	1,382	81	4,147
	1982[a]	2	10	17	83	437	1,334	60	2,764
Iosco	1980	1	12	6	60	481	965	50	1,974
	1981	3	5	7	57	389	836	41	1,788
	1982[a]	0	7	4	43	307	749	49	1,504
Iron	1980	0	1	3	21	153	195	12	589
	1981	0	4	7	23	148	255	23	584
	1982	0	2	1	15	75	210	11	525
Isabella	1980	1	11	14	43	467	1,973	73	4,446
	1981	1	24	20	57	443	1,679	63	4,217
	1982[a]	0	27	11	55	346	1,645	51	4,143
Jackson	1980	8	54	121	708	2,271	5,275	341	13,145
	1981	9	101	170	842	2,591	5,810	388	14,840
	1982[a]	5	62	123	676	2,034	4,975	313	11,533
Kalamazoo	1980	6	68	181	619	2,478	7,366	363	10,200
	1981	3	23	287	1,012	3,344	10,019	367	14,801
	1982[a]	9	141	258	1,658	3,233	9,818	353	15,102
Kalkaska	1980	0	6	3	25	329	446	26	1,282
	1981	0	6	3	48	329	446	20	1,190
	1982	0	7	2	32	286	356	20	1,152
Kent	1980	33	275	650	1,365	6,947	17,488	1,152	33,684
	1981	27	290	673	1,355	7,392	18,244	1,048	30,268
	1982[a]	27	273	716	1,437	6,940	18,263	970	29,720
Keweenaw	1980	0	1	0	2	30	24	2	72
	1981	0	0	0	4	33	27	3	94
	1982	0	0	0	4	19	19	1	78
Lake	1980	0	3	4	23	459	318	9	536
	1981	1	1	2	12	473	268	14	498
	1982	0	2	0	26	280	243	7	476
Lapeer	1980	0	21	17	62	574	1,590	133	3,726
	1981	2	18	16	89	572	1,735	107	4,080
	1982[a]	1	19	16	89	537	1,266	71	3,094

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1980-1982 (cont.)

		Index crimes							
County	Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Leelanau	1980	0	3	4	13	119	236	11	963
	1981	0	4	0	5	82	196	14	817
	1982	0	1	0	8	68	177	13	630
Lenawee	1980	2	24	31	141	791	2,678	149	5,613
	1981	1	16	18	117	903	2,675	150	5,427
	1982[a]	4	16	12	98	728	2,325	100	4,604
Livingston	1980	3	40	35	219	1,155	2,832	282	7,709
	1981	1	23	37	152	1,382	2,744	237	6,813
	1982[a]	5	35	43	161	1,025	2,403	194	5,710
Luce	1980	0	1	1	17	140	208	22	844
	1981	1	1	1	9	117	175	11	529
	1982	0	1	1	10	130	131	18	503
Mackinac	1980	0	3	5	27	246	655	18	1,174
	1981	2	4	4	24	262	607	18	1,240
	1982[a]	0	1	3	19	158	491	19	937
Macomb	1980	26	176	612	1,690	8,179	27,862	4,443	58,806
	1981	30	205	652	1,940	9,193	25,981	4,426	56,110
	1982[a]	17	178	638	2,001	7,882	26,037	4,236	49,659
Manistee	1980	1	8	6	33	429	600	40	1,297
	1981	0	4	6	38	338	563	24	1,291
	1982	0	6	7	23	315	625	27	948
Marquette	1980	0	19	15	135	617	2,338	129	7,250
	1981	2	24	10	141	651	2,374	112	6,665
	1982	2	25	4	109	493	1,899	99	5,186
Mason	1980	0	18	8	29	305	1,008	64	2,755
	1981	0	19	4	28	277	850	45	2,281
	1982	0	6	2	26	244	850	40	1,321
Mecosta	1980	3	6	20	43	447	1,482	61	3,088
	1981	0	5	17	62	397	1,367	59	3,099
	1982	2	7	8	36	410	1,285	48	2,879
Menominee	1980	1	4	5	37	319	539	36	1,476
	1981	1	5	3	50	331	615	43	1,461
	1982	0	3	4	38	203	664	31	1,218

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1980-1982 (cont.)

		Index crimes							
County	Year	Murder nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Midland	1980	0	15	121	76	1,249	2,635	134	5,466
	1981	0	20	50	74	953	2,234	99	4,739
	1982	0	13	5	115	491	2,041	73	2,690
Missaukee	1980	0	1	2	3	134	160	12	218
	1981	0	1	1	8	115	140	7	200
	1982	0	2	0	2	90	136	7	273
Monroe	1980	8	30	64	207	1,473	3,005	409	7,553
	1981	4	20	67	195	1,450	2,787	375	6,615
	1982	4	20	42	158	1,247	2,975	334	4,900
Montcalm	1980	1	23	44	57	550	878	74	1,951
	1981	1	19	24	55	611	1,014	67	3,527
	1982[a]	2	11	12	58	480	1,101	53	3,445
Montmorency	1980	0	0	0	2	200	147	14	251
	1981	0	2	1	7	146	128	3	192
	1982	1	1	0	7	108	89	11	17
Muskegon	1980	12	93	215	951	2,951	7,880	345	13,193
	1981	12	78	224	1,065	3,313	8,067	316	11,644
	1982	5	68	214	1,068	3,177	7,385	276	12,487
Newaygo	1980	1	8	19	43	556	768	56	1,346
	1981	3	19	16	45	499	743	48	1,124
	1982[a]	0	33	13	44	464	649	21	1,141
Oakland	1980	32	310	1,492	2,600	17,275	38,533	5,045	81,451
	1981	24	289	1,484	2,486	17,073	37,441	5,452	79,246
	1982	42	259	1,570	2,553	16,264	37,604	6,516	80,447
Oceana	1980	0	16	2	28	257	439	33	971
	1981	0	14	7	27	239	370	27	935
	1982[a]	1	10	3	20	159	299	14	718
Ogemaw	1980	2	4	7	30	597	527	40	1,574
	1981	1	5	11	35	465	461	53	1,466
	1982	4	7	7	51	325	398	31	1,259
Ontonagon	1980	0	0	3	3	82	143	13	269
	1981	0	1	1	22	66	144	13	345
	1982	0	2	0	30	54	117	8	295

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1980-1982 (cont.)

County	Year	Index crimes: Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Osceola	1980	5	7	2	25	276	379	34	1,023
	1981	0	4	8	29	287	341	28	1,007
	1982[a]	0	2	2	23	209	362	18	970
Oscoda	1980	2	0	0	14	275	289	13	630
	1981	0	1	3	17	190	219	7	538
	1982	0	0	1	14	213	188	5	704
Otsego	1980	2	6	4	19	289	520	28	1,298
	1981	0	7	1	12	215	464	24	1,119
	1982	1	6	0	20	233	391	24	916
Ottawa	1980	2	22	20	104	1,031	3,543	162	6,666
	1981	0	29	29	125	1,030	3,443	163	6,991
	1982	7	13	22	129	912	3,182	147	6,661
Presque Isle	1980	0	1	0	15	166	222	10	360
	1981	2	5	0	12	129	199	10	293
	1982[a]	0	0	0	11	91	132	10	204
Roscommon	1980	1	6	6	35	548	831	74	1,955
	1981	0	12	7	25	560	725	72	1,863
	1982[a]	0	6	3	33	605	679	48	1,418
Saginaw	1980	29	135	376	1,313	4,114	10,113	695	26,641
	1981	25	138	465	1,210	4,675	10,903	602	20,738
	1982[a]	28	135	470	1,292	4,437	10,873	486	17,677
St. Clair	1980	2	47	58	226	2,195	5,196	330	14,274
	1981	3	44	61	242	2,191	5,088	272	13,375
	1982[a]	7	39	44	179	1,672	14,454	221	10,215
St. Joseph	1980	4	21	17	78	473	1,457	58	4,868
	1981	3	19	19	65	474	1,480	83	4,432
	1982[a]	0	22	13	83	397	1,417	38	3,764
Sanilac	1980	1	8	12	58	468	767	58	1,183
	1981	0	10	2	33	448	726	53	2,053
	1982[a]	0	19	7	33	382	627	28	1,423
Schoolcraft	1980	0	7	3	19	158	218	19	588
	1981	0	3	0	24	157	169	15	618
	1982	0	1	2	21	106	173	6	446

TABLE VIII-6. NUMBER OF CRIMINAL OFFENSES REPORTED IN MICHIGAN COUNTIES: 1980-1982 (cont.)

		Index crimes							
County	Year	Murder and nonnegligent manslaughter	Rape	Robbery	Aggravated assault	Burglary	Larceny	Motor vehicle theft	Total nonindex
Shiawassee	1980	1	31	31	135	910	2,139	161	3,834
	1981	0	39	17	101	800	2,031	87	4,132
	1982[a]	0	18	22	74	645	1,589	65	2,823
Tuscola	1980	2	34	8	77	497	972	86	2,863
	1981	5	21	12	110	496	839	78	2,745
	1982[a]	0	14	11	65	456	899	57	2,216
Van Buren	1980	3	25	45	206	1,122	2,091	170	5,554
	1981	1	40	33	247	984	2,128	152	5,768
	1982[a]	4	41	20	246	1,077	2,142	100	5,500
Washtenaw	1980	12	113	328	969	4,372	12,219	1,258	19,298
	1981	16	141	257	871	4,160	11,884	1,193	20,408
	1982[a]	13	128	282	866	3,648	11,436	1,156	18,567
Wayne	1980	635	1,736	15,492	11,664	56,260	86,730	31,609	121,008
	1981	577	1,608	16,723	9,889	64,087	90,178	37,091	120,901
	1982	568	1,451	17,818	8,732	66,783	87,111	40,804	103,112
Wexford	1980	0	17	6	36	585	1,152	62	2,232
	1981	1	8	8	82	501	1,130	54	1,767
	1982	3	5	8	40	379	1,029	36	1,773
TOTAL	1980	941	4,267	22,363	30,760	158,944	337,609	53,562	634,723
	1981	863	4,353	23,644	29,970	170,372	339,676	58,213	613,755
	1982	870	4,083	24,470	28,952	162,457	326,283	61,252	545,976

SOURCE: Michigan Department of State Police, *1982 Uniform Crime Report*, (East Lansing: annually).

a. Figures incomplete due to incomplete jurisdiction reporting.

TABLE VIII-7. PERCENT DISTRIBUTION OF INDEX CRIME OFFENSES: 1976-1982

Offense	1976	1977	1978	1979	1980	1981	1982
Larceny	54.2	54.7	54.6	55.6	55.0	52.4	52.7
Burglary	26.3	25.8	25.6	24.6	26.1	21.7	26.3
Motor vehicle theft	9.4	9.5	9.4	9.8	8.8	9.3	10.0
Aggravated assault	4.7	4.1	5.6	5.6	5.1	4.8	5.0
Robbery	4.5	5.2	3.9	3.6	3.7	3.8	4.1
Arson[a]	--	--	--	--	--	--	1.1
Rape	.7	.6	.7	.7	.7	.7	.7
Murder	.2	.2	.2	.1	.2	.1	.1

SOURCE: Michigan Department of State Police, Uniform Crime Report, (East Lansing: annually).

a. As of 1979, arson was officially classified as an index crime.

TABLE VIII-8. PERCENT DISTRIBUTION OF NON-INDEX CRIME OFFENSES: 1976-1982

Offense	1976	1977	1978	1979	1980	1981	1982
Vandalism	27.3	27.0	29.1	37.4	28.2	26.0	25.1
Drunk and disorderly	15.2	13.8	13.7	15.8	12.8	12.2	13.6
Non-aggravated assault	8.4	8.1	9.2	11.7	9.4	9.6	12.0
Driving under the influence	5.9	5.8	6.4	9.1	7.5	8.4	8.3
Fraud and embezzlement	8.4	4.7	5.8	7.7	6.4	6.2	5.7
Liquor laws	3.3	3.2	3.2	4.7	3.6	3.7	3.8
Narcotic laws	4.4	4.7	4.0	4.4	3.7	3.7	3.4
Stolen property	--	--	1.2	1.6	1.2	1.3	1.5
Sex offenses	1.6	1.4	1.4	1.8	1.3	1.4	1.4
Forgery and counterfeit	--	--	1.0	1.2	1.2	1.1	1.8
Weapons	1.8	2.0	1.2	1.4	1.1	1.0	1.0
Family and children	1.9	2.2	1.1	1.3	1.2	1.2	.8
Arson[a]	1.0	1.0	1.0	1.8	--	1.4	--
All other	24.0	25.9	21.7	--	21.3	22.8	22.4

SOURCE: Michigan Department of State Police, Uniform Crime Report, (East Lansing: Annually).

a. As of 1979, arson was officially classified as an index crime.

IX. ELECTIONS AND GOVERNMENT ORGANIZATIONS

Statistics on governmental organization are collected on the occasion of each Census of Governments conducted by the U.S. Bureau of the Census. That census also is a source of considerable detail on government financing and employment, the subject of chapter X.

Other major sources of information regarding the Michigan government are the biennial Michigan Manual, the Journal of the Senate, and the Journal of the House. In addition, The Book of the States presents information on all states and is a good source for comparative statistics.

Table IX-5 is the only table in the chapter which gives an indication of the Michigan legislature output. It presents some of the scarce readily quantifiable data describing the legislature. For those interested in assessing legislative performance, the Citizens Conference on State Legislature has developed "The Legislative Evaluation Study". This body is a national, nonprofit, nonpartisan organization whose purpose is to help state legislatures improve themselves.

On 1 June 1977 revised Michigan laws relating to campaign financing took effect. As under the old laws, the spending reports of candidates for state will be on file with the Secretary of State. However, the responsibility for filing is shifted to the candidate (or treasurer of a committee) instead of resting with county clerk. Reports still must be filed with the clerk of the county in which the candidate resides.

There is a spending limit of one million dollars for gubernatorial candidates who accept "qualifying contributions" (the state counterpart of federal matching funds). There no longer are spending limits for other offices.

In addition to the filing and expenditure alternations, another organizational change has been made. Each candidate must have only one "candidate committee". Candidates choosing to have more than one committee must report these as "other committees". The Secretary of State is to keep the records on file by committee name (I.D. code) only, not by the candidate supported or by office and district.

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TABLE IX-1. NUMBER OF LOCAL GOVERNMENTAL UNITS IN MICHIGAN AND THE UNITED STATES, BY TYPE: 1952, 1957, 1962, 1967, 1972, 1977, AND 1982

Type	1952	1957	1962	1967	1972	1977	1982
			Michigan				
Counties	83	83	83	83	83	83	83
Municipalities	489	498	509	522	532	531	532
Townships	1,264	1,262	1,259	1,253	1,248	1,245	1,245
Special districts	84	102	99	110	139	168	184
School districts	4,845	3,214	1,866	935	647	606	601
TOTAL	6,766	5,159	3,816	2,903	2,649	2,633	2,646
			United States				
Counties	3,049	3,047	3,043	3,049	3,044	3,042	3,041
Municipalities	16,778	17,167	17,997	18,043	18,517	18,862	19,083
Townships	17,202	17,214	17,144	17,105	16,991	16,822	16,748
Special districts	12,319	14,423	18,323	21,264	23,885	25,962	28,733
School districts	67,346	50,453	34,678	21,782	15,781	15,032	15,032
TOTAL	116,743	102,353	91,185	81,248	78,218	79,913	82,688

SOURCE: Bureau of the Census, Statistical Abstract of the United States, 1945 through 1975 (Washington, D.C.: annually), Table 415 (1975), and 1977 Census of Governments, Preliminary Report No. 1, Governmental Units in 1977 and 1982 (Washington, D.C.), pp. 1, 6.

TABLE IX-2. OFFICIAL CANVASS FOR REPRESENTATIVES IN CONGRESS: 2 NOVEMBER 1982

Congressional district	Candidates	Party	Vote
1	John Conyers, Jr.	Democratic	125,517
1	Bill Krebaum	Libertarian	3,188
1	Eddie Benjamin	Workers League	1,140
2	Carl D. Pursell	Republican	106,960
2	George Wahr Sallade	Democratic	53,040
2	Barbara J. McKenna	Libertarian	3,412
3	Howard Wolpe	Democratic	96,842
3	Richard L. Milliman	Republican	73,315
3	Robert S. Holderbaum	Libertarian	1,111
3	Lizzie M. Hudson	American Independent	693
4	Mark D. Siljander	Republican	87,489
4	David A. Masiokas	Democratic	56,877
4	Richard Wagner	Libertarian	1,544
4	Robert C. Dienkhahn	American Independent	690
5	Harold S. Sawyer	Republican	98,650
5	Stephen V. Monsma	Democratic	87,229
6	Bob Carr	Democratic	84,778
6	Jim Dunn	Republican	78,388
6	James E. Hurrell	Libertarian	1,818
7	Dale E. Kildee	Democratic	118,538
7	George R. Darrah	Republican	36,303
7	Dennis L. Berry	Libertarian	1,842
7	David Freund	Workers League	568
8	Bob Traxler	Democratic	113,515
8	Sheila M. Hart	Libertarian	11,219
9	Guy Vander Jagt	Republican	112,504
9	Gerald D. Warner	Democratic	60,932
10	Don Albosta	Democratic	102,048
10	Lawrence W. Reed	Republican	66,080
10	William Spiers	Libertarian	1,558
11	Bob Davis	Republican	106,039
11	Kent Bourland	Democratic	69,181
12	David E. Bonior	Democratic	103,851
12	Ray Contesti	Republican	52,312
12	Keith P. Edwards	Libertarian	1,501

TABLE IX-2. OFFICIAL CANVASS FOR REPRESENTATIVES IN CONGRESS: 2 NOVEMBER 1982 (cont.)

Congressional district	Candidates	Party	Vote
13	George W. Crockett, Jr.	Democratic	108,351
13	Letty Gupta	Republican	13,732
13	Fred Mazelis	Workers League	1,107
14	Dennis M. Hertel	Democratic	116,421
14	Harold H. Dunn	Libertarian	6,175
15	William D. Ford	Democratic	94,950
15	Mitchell Moran	Republican	33,904
15	Guy R. Collins	American Independent	1,555
16	John D. Dingell	Democratic	114,006
16	David K. Haskins	Republican	39,227
16	Susan Apstein	Socialist Workers	1,071
16	Paul Scherrer	Workers League	450
17	Sander Levin	Democratic	116,901
17	Gerald E. Rosen	Republican	55,620
17	Virginia L. Cropsey	Libertarian	2,955
18	William S. Broomfield	Republican	132,902
18	Allen J. Sipher	Democratic	45,545
18	Joseph Cote	Libertarian	1,813

SOURCE: Michigan Secretary of State, a special release.

TABLE IX-3. DEMOCRATIC AND REPUBLICAN VOTES FOR GOVERNOR AND SECRETARY OF STATE, BY COUNTY: 2 NOVEMBER 1982

	Governor			Secretary of State		
County	James J. Blanchard (Dem.)	Richard H. Headlee (Rep.)	Total votes	Richard H. Austin (Dem.)	Elizabeth A. Andrus (Rep.)	Total votes
Alcona	1,852	2,153	4,113	2,384	1,449	3,874
Alger	1,993	1,372	3,439	2,440	841	3,310
Allegan	8,849	15,927	25,627	12,254	12,041	24,572
Alpena	5,744	5,516	11,502	7,655	3,220	11,014
Antrim	2,799	3,669	6,708	3,706	2,609	6,404
Arenac	2,502	2,237	4,989	3,138	1,515	4,702
Baraga	1,697	1,367	3,026	2,038	868	2,936
Barry	6,670	9,313	16,567	9,003	6,847	16,045
Bay	23,028	16,086	42,287	28,595	10,076	39,239
Benzie	1,980	2,345	4,506	2,517	1,780	4,360
Berrien	18,753	25,453	45,574	22,003	22,428	44,997
Branch	4,474	6,910	11,857	6,440	4,859	11,416
Calhoun	22,564	25,646	49,763	31,238	16,453	48,166
Cass	6,273	6,552	13,254	7,249	5,571	12,950
Charlevoix	3,600	4,062	7,898	5,018	2,729	7,877
Cheboygan	3,946	3,809	7,947	4,753	2,815	7,640
Chippewa	5,332	4,990	10,546	6,773	3,176	10,055
Clare	4,113	3,865	8,300	5,510	2,576	8,245
Clinton	7,569	11,267	19,932	10,597	8,076	18,888
Crawford	1,770	1,948	3,852	2,510	1,228	3,810
Delta	7,953	5,283	13,457	9,155	3,521	12,784
Dickinson	4,766	4,672	9,621	6,158	2,740	8,985
Eaton	12,767	17,330	31,418	17,373	12,580	30,329
Emmet	3,617	4,929	8,741	5,321	3,315	8,744
Genesee	81,331	50,268	140,922	103,337	32,106	138,402
Gladwin	3,546	2,982	6,821	4,742	1,870	6,758
Gogebic	4,730	2,323	7,134	5,106	1,667	6,819
Grand Traverse	7,081	12,188	19,861	10,531	8,351	19,124
Gratiot	4,963	6,186	11,637	6,566	4,527	11,232
Hillsdale	3,915	7,696	12,197	6,047	5,320	11,496
Houghton	6,598	5,582	12,420	8,020	3,582	11,754
Huron	4,589	7,309	12,245	5,759	5,285	11,163
Ingham	50,120	44,205	98,051	64,987	30,347	97,349
Ionia	6,789	8,794	16,317	8,890	6,348	15,521
Iosco	4,488	4,346	9,126	5,469	3,046	8,585
Iron	3,672	2,516	6,295	4,215	1,580	5,871
Isabella	6,318	7,350	14,206	8,917	4,551	13,776
Jackson	20,608	28,507	50,929	29,583	18,785	48,946
Kalamazoo	33,566	36,050	71,382	42,395	25,756	68,980
Kalkaska	1,725	2,073	3,965	2,344	1,398	3,823

TABLE IX-3. DEMOCRATIC AND REPUBLICAN VOTES FOR GOVERNOR AND SECRETARY OF STATE, BY COUNTY: 2 NOVEMBER 1982 (cont.)

	Governor			Secretary of State		
County	James J. Blanchard (Dem.)	Richard H. Headlee (Rep.)	Total votes	Richard H. Austin (Dem.)	Elizabeth A. Andrus (Rep.)	Total votes
Kent	69,327	88,760	162,511	94,183	62,302	158,505
Keweenaw	619	461	1,088	688	344	1,034
Lake	1,786	1,246	3,178	2,112	972	3,137
Lapeer	9,299	11,359	22,211	14,088	7,046	21,786
Leelanau	2,229	3,891	6,308	3,321	2,611	6,025
Lenawee	11,567	13,641	26,600	15,443	9,766	25,453
Livingston	11,888	20,326	33,750	18,479	13,125	32,069
Luce	1,165	1,024	2,231	1,297	815	2,129
Mackinac	2,261	2,190	4,545	2,728	1,598	4,360
Macomb	117,540	105,341	232,047	153,247	60,937	217,719
Manistee	4,312	4,052	8,627	5,299	2,903	8,287
Marquette	12,862	8,308	1,392	14,800	5,241	20,275
Mason	4,214	4,963	9,648	5,676	3,742	9,604
Mecosta	4,135	5,634	10,087	5,563	3,928	9,598
Menominee	4,164	3,367	7,893	4,999	2,529	7,599
Midland	12,326	14,297	27,605	16,772	9,955	27,344
Missaukee	1,515	2,624	4,292	2,498	1,622	4,209
Monroe	17,785	16,011	35,581	23,910	9,852	34,099
Montcalm	6,356	7,739	14,692	7,933	5,726	13,840
Montmorency	1,545	1,822	3,472	2,041	1,218	3,290
Muskegon	25,851	25,261	52,606	34,719	16,179	51,496
Newaygo	4,817	6,689	11,873	6,186	5,065	11,352
Oakland	167,687	184,123	366,305	226,499	119,667	351,351
Oceana	3,161	4,044	7,525	4,278	2,885	7,238
Ogemaw	3,558	2,722	6,575	4,396	1,769	6,227
Ontonagon	2,360	1,730	4,170	2,744	1,157	3,935
Osceola	2,561	3,923	6,782	3,614	2,719	6,412
Oscoda	1,278	1,372	2,768	1,844	821	2,726
Otsego	2,412	2,936	5,503	3,437	1,809	5,336
Ottawa	16,441	40,399	58,361	24,502	31,278	56,221
Presque Isle	2,761	2,747	5,605	3,945	1,581	5,607
Roscommon	4,046	3,729	8,092	5,175	2,452	7,706
Saginaw	41,003	32,380	75,961	53,687	20,206	75,127
St. Clair	20,724	22,213	44,843	28,840	13,559	43,225
St. Joseph	6,306	8,983	15,649	7,532	7,165	14,851
Sanilac	5,070	8,357	13,956	6,822	6,286	13,260
Schoolcraft	1,964	1,400	3,425	2,228	1,052	3,306
Shiawassee	11,099	10,857	24,654	16,001	7,302	23,643
Tuscola	7,638	8,539	16,926	9,861	5,931	15,997
Van Buren	8,847	10,611	20,018	10,601	8,473	19,287
Washtenaw	46,319	34,005	82,937	56,738	22,137	80,096
Wayne	466,088	215,986	700,290	551,367	124,347	685,952
Wexford	3,935	4,494	8,754	5,392	2,938	8,422
TOTAL	1,561,291	1,369,582	3,040,008	1,996,221	900,842	2,940,030

SOURCE: Michigan Department of Management and Budget, Michigan Manual (Lansing: 1983), pp. 451-453.

TABLE IX-4. MICHIGAN REPRESENTATION IN THE STATE HOUSE OF REPRESENTATIVES, BY DISTRICT: 1983-1984

District	Representative	Party	District	Representative	Party
1	Michael J. Bennane	(D)	25	Dennis M. Dutko	(D)
2	Burton Leland	(D)	26	Mary Ellen Parrott	(D)
3	Matthew McNeely	(D)	27	Vincent "Joe" Porreca	(D)
4	Alma G. Stallworth	(D)	28	Robert A. DeMars	(D)
5	Teola P. Hunter	(D)	29	Rick Sitz	(D)
6	Morris Hood, Jr.	(D)	30	Jeffrey D. Padden	(D)
7	Nelson W. Saunders	(D)	31	William Runco	(R)
8	Carolyn Cheeks Kilpatrick	(D)	32	Richard A. Young	(D)
9	Ethel Terrell	(D)	33	William R. Keith	(D)
10	Virgil C. Smith, Jr.	(D)	34	John Bennett	(D)
11	Stanley Stopczynski	(D)	35	Jack Edwin Kirksey	(R)
12	Curtis Hertel	(D)	36	Gerald H. Law	(R)
13	William R. Bryant, Jr.	(R)	37	Edward E. Mahalak	(D)
14	Joseph Young, Sr.	(D)	38	Justine Barns	(D)
15	Joseph Young, Jr.	(D)	39	Jerry C. Bartnik	(D)
16	Juanita Watkins	(D)	40	Timothy L. Walberg	(R)
17	Raymond M. Murphy	(D)	41	Michael E. Nye	(R)
18	Sidney Ouwinga	(R)	42	Glenn Oxender	(R)
19	Donald Van Singel	(R)	43	Carl F. Gnodtke	(R)
20	Rudy J. Nichols	(R)	44	Lad S. Stacey	(R)
21	Richard F. Sullivan	(D)	45	James "Mick" Middaugh	(R)
22	Gary M. Owen	(D)	46	Mary C. Brown	(D)
23	Philip E. Hoffman	(R)	47	Paul Wartner	(R)
24	Robert D. McGee	(R)	48	Donald H. Gilmer	(R)

TABLE IX-4. MICHIGAN REPRESENTATION IN THE STATE HOUSE OF REPRESENTATIVES, BY DISTRICT: 1983-1984 (cont.)

District	Representative	Party	District	Representative	Party
49	Richard Fitzpatrick	(D)	73	Nick Ciaramitaro	(D)
50	Michael J. Griffin	(D)	74	John M. Maynard	(D)
51	Frederick Dillingham	(R)	75	Kenneth J. DeBeaussaert	(D)
52	Margaret O'Connor	(R)	76	James A. Docherty	(D)
53	Perry Bullard	(D)	77	Dick Allen	(R)
54	Paul Hillegonds	(R)	78	Keith Muxlow	(R)
55	William Van Regenmorter	(R)	79	John D. Cherry, Jr.	(D)
56	Ernest Nash	(R)	80	Floyd Clack	(D)
57	David C. Hollister	(D)	81	Robert Emerson	(D)
58	Debbie Stabenow	(D)	82	Thomas E. Scott	(D)
59	H. Lynn Jondahl	(D)	83	Charles L. Mueller	(R)
60	Willis Bullard, Jr.	(R)	84	John G. Strand	(R)
61	Mat J. Dunaskiss	(R)	85	James E. O'Neill, Jr.	(D)
62	Charlie J. Harrison, Jr.	(D)	86	Lewis N. Dodak	(D)
63	Gordon R. Sparks	(R)	87	Francis R. Spaniola	(D)
64	Maxine Berman	(D)	88	Robert Bender	(R)
65	Ruth B. McNamee	(R)	89	Gary L. Randall	(R)
66	Wilfred B. Webb	(D)	90	Victor C. Krause	(R)
67	Joseph Forbes	(D)	91	Walter J. DeLange	(R)
68	Shirley Johnson	(R)	92	Thomas C. Mathieu	(D)
69	Wilbur V. Brotherton	(R)	93	Vernon J. Ehlers	(R)
70	Lloyd R. Weeks	(D)	94	Jelt Sietsema	(D)
71	Sal Rocca	(R)	95	James K. Dressel	(R)
72	David H. Evans	(D)	96	Marvin L. Knight	(R)

TABLE IX-4. MICHIGAN REPRESENTATION IN THE STATE HOUSE OF REPRESENTATIVES, BY DISTRICT: 1983-1984 (cont.)

District	Representative	Party	District	Representative	Party
97	Edgar A. Geerlings	(R)	104	Thomas G. Power	(R)
98	Ed Giese	(R)	105	Thomas Alley	(D)
99	Colleen House Engler	(R)	106	John D. Pridnia	(R)
100	J. Michael Busch	(R)	107	Pat Gagliardi	(D)
101	Thomas L. Hickner	(D)	108	Dominic J. Jacobetti	(D)
102	Michael D. Hayes	(R)	109	Jack L. Gingrass	(D)
103	Ralph Ostling	(R)	110	Donald W. Koivisto	(D)

SOURCE: Michigan Department of Management and Budget, special release.

(R): Republican

(D): Democrat

TABLE IX-5. LEGISLATIVE AND EXECUTIVE ACTION ON BILLS: 1964-1983

	House activity			Senate activity			Gubernatorial action	
Year	House bills introduced	House bills passed House	Senate bills passed House	Senate bills introducted	Senate bills passed Senate	House bills passed Senate	Bills presented to the Governor	Bills vetoed[a]
1964	958	250	112	529	215	193	305	8
1965	1,031	377	178	699	287	264	442	26
1966	1,021	394	106	539	184	260	366	15
1967[b]	1,300	267	152	823	239	168	320	0
1968	971	276	147	585	241	225	372	12
1969	1,924	310	159	1,114	321	198	357	11
1970	974	336	112	669	197	151	264[c]	10
1971	1,840	376	99	1,111	204	136	235	2
1972	578	218[d]	131	383	140	257[d]	388[c]	3
1973	1,528	275	105	1,075	178	123	215	5
1974	792	264	141	4,435	163	251	390	4
1975	1,877	420	114	1,247	208	246	344	8
1976	782	278	176	497	199	294	468	14
1977	1,835	396	105	1,285	200	225	322	3
1978	914	430	219	460	284	433	657	15
1979	1,369	283	85	903	176	146	225	5
1980	790	354	202	430	208	354	546	22
1981	1,370	373	76	610	147	167	234	2
1982	814	357	183	400	180	373	549	8
1983	1,215	322	105	605	165	158	261	2

SOURCE: State of Michigan, Journal of the Senate (Lansing: annually).

a. One veto was overriden during 1977.

b. Including extra session.

c. In 1970 the legislature recalled one bill; in 1972, two.

d. Bills introduced it the first year of a new legislature carry over into the second year; since 1972 was the second year of the 76th legislature, the excess of House bills passing the Senate over those passing the House is explained.

X. GOVERNMENTAL FINANCE AND EMPLOYMENT

Data on the federal tax burden are rough estimates prepared by the Tax Foundation, Inc., a nonprofit research foundation. In developing figures for each state, the Tax Foundation allocates individual income tax liabilities on the basis of data reported by the Internal Revenue Service in its Statistics of Income series, the same documents from which Tables X-3 and X-4 were developed. In the distribution of personal and property income, the assumption is that one-half of the levy is passed on to customers through prices, and the other half is shifted backward to property owners in general. Property income is a component of personal income, accounting for roughly one-seventh of the aggregate. Estate and gift taxes are assumed to be distributed according to the previous six years' total of estate and gift taxes reported in the Annual Report of the Commissioner of Internal Revenue. Excise taxes on alcoholic beverages are assumed to follow the geographic pattern of consumption of distilled spirits, malt beverages, and wines. The state-by-state distribution of tobacco taxes is patterned after population. Similar procedures are used to estimate other federal revenues, in each case employing the most appropriate allocator.

State and local revenue data are collected by the Bureau of the Census in its quinquennial Census of Governments, the latest of which covers 1977. For interim years, the Bureau of the Census develops statistics based on a sample of local governments in each state, along with reports from the District of Columbia and each of the fifty states. No agency, public or private, assesses the geographic burden of state and local revenues in a manner parallel to the Tax Foundation's assessment of the federal tax burden. This means that the Michigan Single Business Tax, for example, is assumed to be borne entirely by residents of this state (Table X-2 and so forth), although it is certainly exported, to some extent, with every car and truck that rolls from an assembly line destined for another state or country. Similarly, part of the well head taxes levied in Texas, Louisiana, Oklahoma, and Wyoming are paid, in the final analysis, by Michiganians and other Americans.

For a number of reasons, the data published by the Bureau of the Census vary from those published in the Michigan State Tax Commission's State of Michigan Financial Reports, and by other in-state sources. The major reason for frequent disagreement is the inclusion of publicly owned community colleges, colleges, and universities in the Bureau of the Census definition of government. In Tables X-7 and X-8, current charges for education include student tuition and fees paid to the state and locally operated colleges and universities; Tables X-14 and X-15 include expenditures of these institutions (pay to faculty, and so forth). In Tables X-5 and X-9, student fees, tuition, and other revenues derived independently by higher education are not included as part of state revenues; Table X-16 reports only expenditures for higher education that the state spends, not the total amount expended by the institutions themselves. Interested readers are encouraged to consult the chapter on education.

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TABLE X-1. AVERAGE EMPLOYMENT IN GOVERNMENT IN MICHIGAN AND THE UNITED STATES: 1957-1983.

(In thousands)

Year	Michigan			United States		
	Federal	State	Local	Federal	State	Local
1957	43.0	64.2	208.4	2,217	1,328.2	4,070.5
1958	43.6	66.5	210.3	2,191	1,415.2	4,232.2
1959	44.0	68.5	212.2	2,233	1,484.3	4,365.8
1960	46.3	71.1	215.3	2,270	1,535.7	4,547.2
1961	47.4	73.4	217.1	2,279	1,607.0	4,707.9
1962	47.0	72.4	223.2	2,340	1,668.4	4,881.2
1963	49.2	73.8	236.4	2,358	1,746.7	5,120.8
1964	48.5	76.9	247.5	2,348	1,856.0	5,391.2
1965	50.6	83.2	261.0	2,378	1,995.9	5,700.2
1966	53.7	94.0	284.6	2,564	2,140.8	6,079.5
1967	56.5	97.8	300.1	2,719	2,301.7	6,370.5
1968	57.9	102.4	310.4	2,737	2,441.8	6,659.8
1969	56.2	109.6	327.9	2,758	2,533.0	6,903.3
1970	57.7	116.0	333.0	2,731	2,664.4	7,158.3
1971	54.9	117.8	336.8	2,696	2,747.4	7,437.3
1972	55.3	122.5	349.1	2,684	2,859.3	7,790.0
1973	55.0	123.9	355.5	2,663	2,922.6	8,145.8
1974	56.3	127.5	378.8	2,724	3,038.5	8,407.0
1975	56.1	132.6	394.4	2,748	3,179.3	8,757.9
1976	55.5	135.1	404.0	2,733	3,272.9	8,864.6
1977	54.7	136.9	405.2	2,727	3,376.9	9,022.5
1978	54.6	143.6	413.2	2,753	3,473.5	9,445.5
1979	56.7	147.7	416.6	2,773	3,540.8	9,633.3
1980	58.2	152.3	417.3	2,866	3,609.9	9,765.0
1981	55.9	147.8	394.7	2,772	3,623.3	9,629.1
1982	55.9	142.2	379.7	2,739	3,632.2	13,064[a,b]
1983	55.5	141.1	379.4	2,752	--	12,992[a,b]

SOURCE: Michigan Employment Security Commission Special release, and Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C.: Monthly), March, 1984, Tables B-1.

a: preliminary
b: includes state and local

TABLE X-2. STATE AND LOCAL TAX COLLECTIONS AND FEDERAL TAX BURDEN IN MICHIGAN AND THE UNITED STATES, FISCAL YEARS: 1965-1982

(Millions of dollars)

Fiscal year	Federal		States		Local		Total	
	Michigan	United States	Michigan	United States	Michigan	United States	Michigan	United States
1965	n.a.	n.a.	1,328.6	26,126.1	1,052.5	25,451.4	n.a.	n.a.
1966	5,590	123,402	1,467.7	29,379.8	1,127.6	27,360.8	8,185.3	180,142.6
1967	n.a.	n.a.	1,530.8	31,926.0	1,184.4	29,074.0	n.a.	n.a.
1968	6,982	143,950	1,885.6	36,400.2	1,319.3	31,171.4	10,186.9	211,521.6
1969	n.a.	n.a.	2,248.8	41,930.7	1,505.4	34,781.2	n.a.	n.a.
1970	8,936	186,947	2,345.1	47,962.0	1,697.9	38,833.3	12,979.0	273,742.3
1971	n.a.	n.a.	2,543.9	51,541.2	1,876.7	43,434.0	n.a.	n.a.
1972	8,949	193,697	3,062.4	59,870.0	2,184.7	49,739.0	14,196.1	303,306.0
1973	n.a.	n.a.	3,527.6	68,069.3	2,216.9	53,032.4	n.a.	n.a.
1974	11,492	243,467	3,681.2	74,207.0	2,497.8	56,515.0	17,671.0	374,189.0
1975	n.a.	n.a.	3,486.0	80,154.9	2,757.0	61,310.1	n.a.	n.a.
1976	12,919	278,420	3,769.5[a]	89,255.5	3,049.8	67,557.4	19,738.3	435,232.9
1977	n.a.	n.a.	4,843.7	101,084.0	3,137.9	84,851.6	n.a.	n.a.
1978	17,357	389,164	5,444.9	113,260.9	3,365.9	80,380.8	26,167.8	582,805.7
1979	20,737	450,816	6,017.7	124,962.9	3,645.8	80,606.1	30,400.5	656,385.0
1980	23,394	500,950	5,947.6	137,075.2	4,008.8	86,387.5	33,350.4	724,412.7
1981	n.a.	n.a.	6,177.0	149,737.9	4,505.1	94,776.2	n.a.	n.a.
1982	n.a.	n.a.	6,307.2	162,657.8	5,089.6	103,641.2	n.a.	n.a.

SOURCE: Bureau of the Census, 1977 Census of Governments, Compendium of Government Finances (Washington, D.C.: 1979), vol. 4, no. 5, Tables 3 and 47, and similar documents for 1967 (Table 23), and 1972 (Table 23); Bureau of the Census, Governmental Finances, 1981-82 (Washington, D.C.: 1982), Table 6, and similar documents for other years between quinquennial Censuses of Governments; and Tax Foundation, Inc., Facts and Figures on Government Finance, 1958-59 through 1981 (New York: biennially), Table 101 (1980), and special release (1979 data).

a. Pertains to the fiscal year ended 30 June 1976. The 1977 fiscal year ended 30 September 1977. During the fiscal year ended 30 June 1976, state tax collections totaled $3,769,500,000. If the fiscal year had ended 30 September 1976, they would have totaled around $4,200,000,000.

n.a.: not available.

TABLE X-4. DETAILED FEDERAL PERSONAL INCOME TAX STATISTICS, MICHIGAN AND THE UNITED STATES: 1980 AND 1981

(money amounts in thousands of dollars)

Item	Michigan		United States	
	1980	1981	1980	1981
Number of returns	3,665,336	3,608,594	93,902,469	95,396,123
Adjusted gross income less deficit	66,797,050	70,636,226	1,613,731,497	1,772,604,303
Salaries and wages (gross):				
Number of returns	3,309,919	3,216,221	83,802,109	84,208,807
Amount	57,378,970	61,374,218	1,349,842,802	1,486,100,497
Business or profession net profit less loss:				
Number of returns	281,426	306,126	8,881,119	9,571,409
Amount	1,840,308	1,601,286	55,129,154	53,071,628
Farm net profit less loss:				
Number of returns	83,856	87,735	2,608,430	2,641,254
Amount	-43,172	-215,736	-1,792,466	-7,811,958
Partnership net profit less loss:				
Number of returns	117,052	117,895	3,154,658	3,752,209
Amount	533,499	-146,089	9,428,596	-137,650
Sales of capital assets net gain less loss:				
Number of returns	299,695	334,344	8,929,474	9,484,987
Amount	667,745	626,410	29,659,600	30,818,535
Sales of property other than Capital asse[illegible] net gain less loss:				
Number of returns	24,384	32,465	1,094,657	1,149,793
Amount	8,485	671	76,285	232,444
Total domestic and foreign dividends received:				
Number of returns	575,304	686,451	14,567,903	16,482,018
Amount	1,348,967	1,510,661	40,375,626	48,161,460

TABLE X-4. DETAILED FEDERAL PERSONAL INCOME TAX STATISTICS, MICHIGAN AND THE UNITED STATES: 1980 AND 1981 (cont.)

(money amounts in thousands of dollars)

Item	Michigan		United States	
	1980	1981	1980	1981
Interest received:				
Number of returns	2,062,482	2,047,841	49,019,575	49,656,550
Amount	3,723,463	4,643,079	102,009,444	140,559,366
Rent net income less loss:				
Number of returns	278,853	270,742	7,463,817	7,778,048
Amount	-25,607	-98,477	200,397	-2,765,090
Royalty net income less loss:				
Number of returns	18,544	21,206	744,315	830,970
Amount	43,616	100,144	3,904,984	5,826,913
Estate or trust net income less loss:				
Number of returns	17,391	20,126	906,297	770,524
Amount	79,631	23,113	4,560,031	3,965,822
Pensions and annuities in adjusted gross income:				
Number of returns	290,411	337,576	7,373,704	8,157,475
Amount	1,457,018	1,907,090	43,339,736	51,886,406
Small business corporation net: profit less loss				
Number of returns	29,882	27,521	755,868	778,408
Amount	26,233	-80,614	670,751	-817,171
State income tax refunds:				
Number of returns	568,256	665,745	10,525,604	11,560,119
Amount	143,821	186,978	3,629,571	4,371,339
Unemployment compensation total:				
Number of returns	584,869	576,111	7,997,862	8,398,488
Amount	1,617,473	1,142,074	13,634,772	12,386,473

TABLE X-4. DETAILED FEDERAL PERSONAL INCOME TAX STATISTICS, MICHIGAN AND THE UNITED STATES: 1980 AND 1981 (cont.)

(money amounts in thousands of dollars)

Item	Michigan 1980	Michigan 1981	United States 1980	United States 1981
In adjusted gross income:				
Number of returns	196,445	244,036	1,798,210	2,245,250
Amount	330,877	311,372	2,082,456	2,315,317
Exemptions:				
Number of returns	9,038,850	8,994,396	227,925,098	231,222,374
Amount	9,035,092	8,993,542	227,569,280	231,119,115
Total itemized deductions:				
Number of returns	1,406,641	1,475,330	28,950,282	31,571,246
Amount	9,820,641	11,025,247	218,028,139	256,448,021
Taxable income:				
Number of returns	3,455,743	3,409,563	88,104,696	89,851,304
Amount	52,883,930	55,981,277	1,279,985,360	1,410,880,665
Income tax after credits:				
Number of returns	2,871,072	2,886,487	73,840,395	76,635,184
Amount	10,397,993	11,122,856	249,087,475	282,302,029
Total income tax:				
Number of returns	2,872,392	2,888,952	73,906,244	76,724,724
Amount	10,418,234	11,161,004	250,341,440	284,128,989
Total tax liability:				
Number of returns	2,923,208	2,934,984	75,325,013	78,211,107
Amount	10,606,832	11,348,177	256,251,076	291,126,542

SOURCE: Internal Revenue Service, Statistics of Income, 1980, Individual Income Tax Returns (Washington, D.C.: 1982); Table 4.1; and Statistics of Income, 1981, Individual Income Tax Returns (Washington, D.C.: 1983), Table 4.1

TABLE X-5. ORIGIN AND ALLOCATION, BY LEVEL OF GOVERNMENT, OF GENERAL REVENUE OF MICHIGAN STATE AND LOCAL GOVERNMENTS: FISCAL YEARS 1962-1982

(In millions of dollars)

Year	Originating level of government			Final recipient level of government		Total general revenue
	Federal	State	Local	State	Local	
1961-62	289.5	1,156.6	1,141.1	910.9	1,676.2	2,587.1
1962-63	338.9	1,311.5	1,249.6	990.7	1,909.2	2,899.9
1963-64	404.3	1,408.6	1,312.3	1,144.0	1,981.2	3,125.2
1964-65	426.2	1,545.5	1,398.6	1,255.2	2,115.1	3,370.3
1965-66	471.9	1,724.0	1,528.6	1,347.0	2,377.6	3,724.6
1966-67	593.6	1,835.4	1,623.5	1,435.5	2,617.0	4,052.5
1967-68	637.6	2,226.6	1,800.3	1,868.2	2,796.2	4,664.5
1968-69	711.0	2,640.1	2,053.9	2,160.3	3,244.7	5,405.0
1969-70	818.2	2,769.7	2,330.6	2,264.5	3,654.0	5,918.5
1970-71	1,019.1	3,019.3	2,574.3	2,490.9	4,121.9	6,612.7
1971-72	1,306.9	3,572.1	3,038.9	3,121.8	4,796.2	7,918.0
1972-73	1,769.7	4,121.3	3,109.1	3,822.7	5,177.5	9,000.2
1973-74	1,845.2	4,417.1	3,538.4	3,889.5	5,911.3	9,800.8
1974-75	2,124.4	4,267.9	3,947.0	3,846.9	6,492.4	10,339.3
1975-76	2,667.3	4,607.0[a]	4,319.8	4,327.0	7,267.0	11,594.1
1976-77	2,841.1	5,763.5	4,580.3	5,192.1	7,992.8	13,184.9
1977-78	3,131.3	6,556.6	4,793.9	5,901.9	8,579.9	14,481.8
1978-79	3,399.8	7,302.0	5,408.3	6,612.8	9,497.2	16,110.0
1979-80	3,897.3	7,460.4	6,125.9	6,977.9	10,505.7	17,483.6
1980-81	4,093.8	7,908.2	6,857.1	7,934.9	10,924.2	18,859.1
1981-82	3,962.4	8,213.1	8,074.9	8,371.6	11,878.9	20,250.4

SOURCE: Bureau of the Census, *U.S. Census of Governments, 1972*, vol. 4, *Government Finances*, no. 5, *Compendium of Government Finances* (Washington, D.C.: 1974), Table 23, and similar census documents for 1962 (Table 25), and 1967 (Table 23); and Bureau of the Census, *Governmental Finances, 1980-81* (Washington, D.C.: 1983), Series GF-82, no. 5, Table 8.

NOTE: Includes revenues of public institutions of higher education, exclusive of their state or local support.

a. Pertains to the fiscal year ended 30 June 1976. The 1977 fiscal year ended 30 September 1977. During the fiscal year ended 30 June 1976, state tax collections totaled $3,769,500,000. If the fiscal year had ended 30 September 1976, they would have totaled around $4,200,000,000.

TABLE X-6. PERCENTAGE OF GENERAL REVENUE OF STATE AND LOCAL GOVERNMENTS ORIGINATING AT FEDERAL, STATE, AND LOCAL LEVEL, MICHIGAN AND UNITED STATES: FISCAL YEARS 1962-1982

	Originating level of government						Final recipient level of government			
	Michigan			United States			Michigan		United States	
Year	Federal	State	Local	Federal	State	Local	State	Local	State	Local
1961-62	11.2	44.7	44.1	13.5	40.6	45.8	35.2	64.8	34.8	65.2
1962-63	11.7	45.2	43.1	13.9	40.8	45.4	34.2	65.8	35.1	64.9
1963-64	12.9	45.1	42.0	14.6	41.2	44.2	36.6	63.4	36.2	63.8
1964-65	12.6	45.9	41.5	14.8	41.2	44.0	37.2	62.8	36.1	63.9
1965-66	12.7	46.3	41.0	15.8	41.6	42.6	36.2	63.8	36.6	63.4
1966-67	14.6	45.3	40.1	16.9	41.4	41.7	35.4	64.6	36.9	63.1
1967-68	13.6	47.7	38.5	16.9	42.6	40.3	40.0	59.9	38.3	61.6
1968-69	13.1	48.8	37.9	16.7	43.2	40.0	39.9	60.1	37.9	62.0
1969-70	13.8	46.7	39.3	16.7	43.9	39.3	38.2	61.7	38.8	61.1
1970-71	15.4	45.6	38.9	18.0	42.2	39.6	37.6	62.3	37.2	62.7
1971-72	16.5	45.1	38.4	18.7	42.2	39.1	39.4	60.6	37.9	62.1
1972-73	19.7	45.8	34.5	20.6	42.3	37.1	42.5	57.5	38.5	61.5
1973-74	18.8	45.1	36.1	20.1	42.9	36.9	39.7	60.3	37.4	62.6
1974-75	20.5	41.3	38.2	20.6	42.4	37.0	37.2	62.8	36.6	63.4
1975-76	23.0	39.7	37.3	21.7	41.9	36.4	37.3	62.7	38.1	61.9
1976-77	21.5	43.7	34.7	21.9	42.4	35.7	39.4	60.6	38.3	61.7
1977-78	21.6	45.3	33.1	22.0	42.9	35.0	39.4	60.6	40.8	59.2
1978-79	21.1	45.3	33.6	21.9	44.0	34.1	41.0	59.0	39.0	61.0
1979-80	22.3	42.7	35.0	21.7	44.3	34.0	39.9	60.1	39.8	60.2
1980-81	21.7	41.9	36.4	21.3	44.3	34.4	42.1	57.9	39.9	60.1
1981-82	19.6	40.6	39.9	19.1	45.2	35.8	41.3	58.7	39.5	60.5

SOURCES: Bureau of the Census, U.S. Census of Governments, 1972, vol. 4, Government Finances, no. 5, Compendium of Government Finances (Washington, D.C.: 1974), Table 23, and similar census documents for 1962 (Table 25), and 1967 (Table 23); and Bureau of the Census, Governmental Finances, 1981-82 (Washington, D.C.: 1983), Series GF-82, no. 5, Table 8.

NOTE: Includes revenues of public institutions of higher education, exclusive of their state or local support.

TABLE X-3. COMPARATIVE FEDERAL PERSONAL INCOME TAX STATISTICS, MICHIGAN AND THE UNITED STATES: 1962-1981

Year	Number of returns (000)		Thousands of dollars							
			Adjusted gross income		Salaries and wages		Taxable income		Income tax[a]	
	Michigan	United States	Michigan	United States	Michigan	United States	Michigan	United States	Michigan	United States
1962	2,612	62,709	15,949	348,707	13,526	283,367	9,159	195,307	2,107	44,893
1963	2,682	63,943	17,033	368,728	14,362	299,381	9,976	209,090	2,315	48,204
1964	2, 78	65,375	18,922	396,717	15,856	323,292	11,409	229,881	2,361	47,160
1965	2,946	67,599	20,959	429,254	17,480	347,199	13,152	255,070	2,582	49,525
1966	3,051	70,153	23,003	468,347	19,329	380,934	14,779	286,230	2,934	56,071
1967	3,081	71,653	24,061	504,719	20,095	411,537	15,661	314,990	3,154	62,899
1968	3,169	73,731	26,372	554,337	22,092	451,430	17,322	352,672	3,776	76,611
1969	3,255	75,845	28,920	603,602	24,686	498,973	19,326	388,817	4,343	86,569
1970	3,155	74,278	29,267	631,626	25,256	531,869	19,067	401,057	4,005	83,759
1971	3,143	74,573	31,283	673,677	27,132	565,056	19,880	414,028	4,100	85,253
1972	3,270	77,570	35,084	746,006	30,403	622,656	21,912	445,558	4,599	93,354
1973	3,423	80,693	39,221	827,148	34,162	687,179	25,194	511,929	5,350	107,901
1974	3,461	83,340	41,248	905,523	36,163	758,629	26,638	573,606	5,723	123,465
1975	3,355	82,177	41,156	948,094	35,811	795,213	26,418	595,626	5,547	124,624
1976	3,461	84,536	46,834	1,053,593	40,682	879,770	30,829	674,428	6,521	140,919
1977	3,573	86,635	52,969	1,158,492	46,456	969,404	n.a.	n.a.	7,857	159,797
1978	3,698	89,772	59,980	1,302,447	52,501	1,090,292	n.a.	n.a.	9,187	188,233
1979	3,765	92,694	65,912	1,465,395	57,831	1,229,251	52,471	1,157,248	10,003	214,495
1980	3,665	93,902	66,797	1,613,731	57,379	1,349,843	n.a.	n.a.	10,418	250,341
1981	3,609	95,396	70,636	1,772,604	61,374	1,486,100	n.a.	n.a.	11,161	284,129

SOURCE: Internal Revenue Service, Statistics of Income, Individual Income Tax Returns (Washington, D.C.: annually).

NOTE: Items included on income tax returns filed by Michigan and U.S. residents.

a. After credits

n.a.: Not available.

TABLE X-7. REVENUE OF LOCAL GOVERNMENTS IN MICHIGAN AS DEFINED BY THE BUREAU OF THE CENSUS, FISCAL YEARS: 1972, 1977, 1980, 1981, AND 1982

(In millions of dollars)

Item	1972	1977	1980	1981	1982
General revenue	4,853.8	7,886.6	10,593.4	11,157.5	12,195.7
Federal government	248.7	799.3	1,168.3	1,165.9	1,051.3
State government	1,566.2	2,655.9	3,299.2	3,134.5	3,069.4
Own sources	3,395.9	4,431.4	6,125.9	6,857.1	8,074.9
Taxes	2,184.7	3,137.9	4,008.8	4,505.1	5,089.6
Property	2,005.4	2,874.8	3,699.1	4,200.2	4,687.9
Individual income	135.1	187.6	212.7[b]	201.5[b]	295.1[b]
Other	44.1	75.3	96.8	103.1	106.1
Charges & miscellaneous	854.2	1,293.5	2,117.1	2,352.0	2,985.3
Current charges	586.8	950.8	1,458.3	1,582.2	1,804.6
Education	135.1	203.5	259.7	282.1	292.6
School lunch[a]	63.4	70.7	n.a.	n.a.	n.a.
Other	71.7	132.9	682.7	748.6	841.5
Hospitals	207.0	347.4	515.8	551.4	670.6
Sewerage	85.3	151.4	n.a.	n.a.	n.a.
Airports	17.6	39.5	n.a.	n.a.	n.a.
Other	141.8	209.0	n.a.	n.a.	n.a.
Special assessments	63.9	38.7	n.a.	n.a.	n.a.
Sale of property	10.3	5.5	n.a.	n.a.	n.a.
Interest earnings	102.8	143.1	386.7	462.3	509.9
Other	90.3	155.4	272.1	307.5	670.9
Utility revenue	251.7	411.4	519.7	590.0	586.4
Water supply	152.8	239.0	n.a.	n.a.	n.a.
Electric power	59.6	137.2	n.a.	n.a.	n.a.
Transit	39.3	35.1	n.a.	n.a.	n.a.
Insurance trust revenue, Employee retirement	105.2	163.0	267.3	315.9	378.2
TOTAL	5,210.8	8,461.0	11,380.4	12,063.4	13,160.3

SOURCE: Bureau of the Census, U.S. Census of Governments, 1977, vol. 4, Government Finances, no. 5, Compendium of Government Finances (Washington, D.C.: 1979), Table 47, and similar census documents for 1972 (Table 46); and Bureau of the Census, Governmental Finances, 1981-82 (Washington, D.C.: 1983), Series GF-82, No. 5, Table 5.

a. Gross sales.
b. Individual & Corporate Income.
n.a.: not available.

TABLE X-8. REVENUE OF THE STATE OF MICHIGAN AS DEFINED BY THE BUREAU OF THE CENSUS, FISCAL YEARS: 1972, 1977, 1980, 1981 AND 1982

(In millions of dollars)

Item	1972	1977	1980	1981	1982
General Revenue	4,688.0	7,891.6	10,277.2	11,069.4	11,441.0
Federal-governmet[a]	1,058.2	2,042.2	2,729.1	2,927.9	2,911.1
Local governmennt	57.6	85.8	87.7	233.4	316.8
Own sources	3,572.1	5,763.5	7,460.4	7,908.2	8,183.1
Taxes	3,062.4	4,843.7	5,947.7	6,177.0	6,307.2
Property	93.3	117.7	133.4	142.8	155.2
General sales and use	987.7	1,407.0	1,706.7	1,792.7	1,843.7
Selective sales	582.0	757.9	850.0	808.4	773.2
Motor fuel	300.8	430.4	473.6	438.0	421.9
Alcoholic beverages	72.0	80.0	90.3	92.8	96.3
Tobacco products	128.7	140.3	140.4	140.6	135.3
Other	81.0	107.2	145.8	136.9	119.7
Motor vehicle licenses	160.6	180.3	248.6	224.6	232.3
Individual income	0	728.9	1,465.5	2,028.4	2,126.6
Other	509.4	915.3	1,002.5	1,046.3	1,036.7
Charges & miscellaneous	509.8	919.8	1,512.7	1,731.2	1,905.9
Current charges	399.7	592.8	858.4	973.6	1,075.2
Education[b]	296.6	422.3	577.1	638.4	722.8
Hospitals	64.8	109.6	198.8	242.9	262.1
Other	38.3	60.9	82.6	92.3	90.3
Sale of property	2.3	1.2	1.6	1.2	1.2
Interest earnings	50.1	95.5	245.2	278.3	287.7
Other	57.7	230.3	407.5	478.0	541.9
Liquor Store Revenue	306.5	338.3	405.8	417.6	422.9
Insurance Trust Revenue	477.4	1,459.4	1,673.6	3,547.7	2,723.1
Unemployment compensation	247.8	967.1	1,023.0	2,711.1	1,540.5
Employee retirement	213.2	439.1	593.2	783.3	994.3
Other	16.4	53.2	57.4	53.3	188.3
TOTAL	5,471.9	9,689.2	12,356.6	15,034.8	14,587.0

SOURCE: Bureau of the Census, U.S. Census of Governments, 1977, vol. 4, Government Finances, no. 5, Compendium of Government Finances (Washington, D.C.: 1972), Table 46; and Bureau of the Census, State Government Finances, 1982 (Washington, D.C.: 1983), Series GF-82, no. 3, Table 7.

a. Includes federal payments to state institutions of higher education.

b. Revenues of state institutions of higher education, exclusive of payments from state and federal government.

TABLE X-9. REVENUE OF STATE OF MICHIGAN, AS DEFINED BY THE STATE OF MICHIGAN (EXCLUSIVE OF REVENUES OF STATE INSTITUTIONS OF HIGHER EDUCATION), FISCAL YEARS: 1982 AND 1983

(In thousands of dollars)

Source	1982	1983
Taxes		
Sales tax	1,570,630	1,698,983
Personal income tax	2,292,258	2,766,377
Corporation income tax	9,927	5,353
Single business tax	943,148	1,041,745
Use tax	247,358	279,516
Cigarette tax	188,003	242,068
Beer and wine tax	52,602	51,462
Liquor excise tax	39,172	38,444
Horse race wagering tax	22,028	21,118
Intangibles tax	48,353	52,768
Inheritance tax	57,663	64,169
Telephone and telegraph company tax	105,195	107,984
Insurance company premium tax	104,253	101,573
Motor vehicle weight tax	213,531	237,724
Gasoline Tax	430,961	434,575
Aviation fuel tax	2,911	2,983
Diesel fuel tax	24,025	28,834
Gas and oil severance tax	90,717	78,679
Industrial facilities tax	23,455	32,185
Watercraft registration tax	2,016	2,081
Penalties and interest-sales, income, use, and single business tax	28,669	39,064
Other taxes	3,705	5,739
TOTAL	6,500,591	7,333,434
From federal agencies:		
Dept. of Health and Human Services	1,747,621	1,863,240
Department of Education	220,819	218,573
Department of Agriculture	140,599	157,923
Department of Labor	186,465	185,765
Dept. of Housing & Urban Development	27,625	42,311
Environmental Protection Agency	11,699	12,318
Department of Transportation	186,965	220,196
Department of Energy	10,141	20,625
Department of Interior	11,738	9,560
Department of Defense	7,219	10,840
Department of Justice	7,061	4,583
Other federal agencies	19,908	22,832
TOTAL	2,577,866	2,768,773

TABLE X-9. REVENUE OF STATE OF MICHIGAN, AS DEFINED BY THE STATE OF MICHIGAN (EXCLUSIVE OF REVENUES OF STATE INSTITUTIONS OF HIGHER EDUCATION), FISCAL YEARS: 1982 AND 1983 (cont.)

(In thousands of dollars)

Source	1982	1983
From local agencies:		
Counties	279,767	113,468
Cities, villages, and townships	12,296	16,378
Colleges and universities	5,120	4,652
School districts	3,692	4,904
Multi-level governmental units	2,949	1,292
Other local agencies	2,416	1,794
TOTAL	306,244	142,491
From services:		
Charges for furnishing vehicle driver records	14,078	15,112
Revenue from patients, wards, and inmates	38,275	42,184
Other services	7,425	5,214
TOTAL	59,779	62,511
From licenses and permits:		
Liquor retailers', manufacturers', and wholesalers' licenses	11,756	11,948
Motor vehicle operators' and chauffeurs' licenses	11,807	13,287
Examination fees--financial institutions and insurance industry	3,755	3,749
Department of licensing and regulation licenses and permits	15,009	15,090
Concession and privilege fees--state parks	6,378	7,357
Motor vehicle title fees, license plate transfer and dealers' plates, various special fees, and registrations	18,607	20,876
Hunting, fishing, and trapping licenses	25,341	24,342
Public utility assessment fees	9,382	10,369
Department of Commerce licenses & permits	4,537	5,831
Department of Agriculture licenses and permits	2,476	2,352
Auto repair facilities and mechanics licenses and fees	2,553	2,670
Other licenses and permits	12,188	12,200
TOTAL	123,794	130,075

TABLE X-9. REVENUE OF STATE OF MICHIGAN, AS DEFINED BY THE STATE OF MICHIGAN (EXCLUSIVE OF REVENUES OF STATE INSTITUTIONS OF HIGHER EDUCATION), FISCAL YEARS: 1982 AND 1983 (cont.)

(In thousands of dollars)

Source	1982	1983
Miscellaneous		
Lottery operations	527,371	553,294
Revenue from escheated estates	8,662	20,171
Air and water surveillance fees	5,280	3,637
Income from investments	52,918	43,227
Various fines, fees, and assessments	15,583	9,168
Court fines, fees, and assessments	9,871	12,571
Oil and gas royalties, fees, assignments, and rentals	61,087	35,388
Mackinac Bridge and International Bridge Authority payroll contributions	2,654	1,010
Environmental pollution settlements	8,191	986
Sale of forest products on tax reverted land	3,142	3,289
Other miscellaneous	38,246	38,508
TOTAL	733,009	721,253
Other financing sources:		
Proceeds from sale of bonds	--	132,186
Operating transfers in:		
From general and special revenue funds	1,352,536	1,094,210
From other funds	110,827	84,792
TOTAL	1,463,364	1,311,189
TOTAL REVENUE	11,764,649	12,469,728

SOURCE: Michigan Department of Management and Budget, State of Michigan Financial Report, 1982 and 1983 (Lansing: annually), pp. 104-105 (1982) and pp. 148-149 (1983).

TABLE X-10. REVENUE OF LOCAL GOVERNMENTS IN MICHIGAN, BY LEVEL OF GOVERNMENT: 1981-1982

(In millions of dollars)

Item	All local governments	Counties	Municipalities	Townships	Special districts	School districts
Total revenue	13,160.3[a]	2,545.1	4,686.8	531.7	412.2	5,376.0
General revenue total	12,195.7[a]	2,453.7	3,894.4	484.3	378.8	5,376.0
Intergovernmental revenue	4,120.7[a]	1,163.9	1,382.1	147.4	133.3	1,685.6
From federal government	1,051.3	244.2	649.4	28.5	72.0	57.2
From state government	3,069.4	741.0	644.2	114.2	50.5	1,519.5
General revenue from own sources	8,074.9	1,289.8	2,512.3	336.9	245.5	3,690.4
Tax revenue	5,089.6	538.0	1,200.9	161.8	12.9	3,176.0
Property tax	4,687.9	519.0	836.0	155.8	12.9	3,164.3
Other taxes	401.7	19.0	364.9	6.0	--	11.7
Charges and miscellaneous general Revenue	2,985.3	751.8	1,311.4	175.1	232.6	514.4
Utility system and liquor store revenue	586.4	10.3	499.3	43.5	33.3	--
Employee retirement revenue	378.2	81.1	293.1	4.0	--	--

SOURCE: Bureau of the Census, Governmental Finances in 1981-82 (Washington, D.C.: 1983), GF82, No. 5, Table 23.

[a] Duplicative intergovernmental transactions are excluded.

TABLE X-11. FEDERAL, STATE, AND LOCAL GOVERNMENT DIRECT GENERAL EXPENDITURES IN MICHIGAN AND THE UNITED STATES, FISCAL YEARS: 1960-1982

	Federal		State		Local		Total	
Fiscal year	Michigan	United States	Michigan	United States	Michigan	United States	Michigan	United States
1960	n.a.	n.a.	790	17,946	1,582	33,931	n.a.	n.a.
1961	n.a.	n.a.	903	19,004	1,721	37,197	n.a.	n.a.
1962	n.a.	n.a.	955	20,375	1,823	39,831	n.a.	n.a.
1963	n.a.	n.a.	972	22,491	1,974	42,324	n.a.	n.a.
1964	n.a.	n.a.	1,018	24,274	2,113	45,027	n.a.	n.a.
1965	n.a.	n.a.	1,054	26,141	2,229	48,813	n.a.	n.a.
1966	n.a.	n.a.	1,242	29,162	2,503	53,680	n.a.	n.a.
1967	n.a.	n.a.	1,553	34,249	2,771	59,101	n.a.	n.a.
1968	n.a.	n.a.	1,742	38,446	2,960	63,966	n.a.	n.a.
1969	n.a.	n.a.	1,929	43,244	3,459	73,483	n.a.	n.a.
1970	4,053	168,152	2,146	48,749	3,864	82,582	10,063	299,483
1971	4,531	182,702	2,481	56,478	4,329	94,196	11,341	333,376
1972	4,813	195,672	2,913	62,051	4,951	106,499	12,677	364,222
1973	5,452	221,354	3,280	67,264	5,302	113,822	14,034	402,440
1974	6,249	239,636	3,630	73,950	5,746	124,668	15,625	438,254
1975	7,538	279,672	4,269	86,326	6,636	143,148	18,443	509,146
1976	7,787	303,281	4,513	95,832	7,391	159,720	19,691	558,833
1977	9,466	333,212	4,801	101,891	7,723	170,938	21,990	606,041
1978	9,745	363,269	5,291	112,515	8,400	182,995	23,436	658,779
1979	10,928	394,582	5,938	124,559	9,446	201,470	26,312	720,611
1980	12,211	445,659	6,934	143,718	10,467	223,621	29,612	812,998
1981	17,614	562,219	7,178	160,474	10,998	245,102	35,790	967,795
1983	18,016	603,576	7,682	170,747	11,390	262,783	37,088	1,037,106

SOURCE: Bureau of the Census, 1977 Census of Governments, Compendium of Government Finances (Washington, D.C.: 1979), vol. 4, no. 5, Table 3 and 47, and similar documents for 1962 (Table 25), 1967 (Table 23), and 1972 (Table 23); Bureau of the Census, Governmental Finances, 1980-81 (Washington, D.C.: 1982), Table 13, Governmental Finances, 1981-82 (Washington, D.C.: 1983), Table 13, and similar documents for other years between quinquennial Censuses of Governments; and Executive Office of the President, Geographic Distribution of Federal Funds in Michigan, Fiscal Year 1980 (Washington, D.C.: 1981), National and State Summaries section, p. 2, Federal Expenditures by State for Fiscal Year 1981, 1982 (Washington, D.C.: annually), Table 1, and similar documents for previous years.

n.a.: not available.

TABLE X-12. DEPARTMENT OF DEFENSE MILITARY PRIME CONTRACT AWARDS IN MICHIGAN, FISCAL YEARS: 1951-1983

Year	Amount ($000)	Percentage	Army ($000)	Navy ($000)	Air Force ($000)	Defense Logistics Agency ($000)
1951	2,470,032	8.3	1,284,119	387,769	798,144	
1952	5,253,562	13.7	2,962,445	494,408	1,796,709	
1953	1,325,201	4.9	945,775	- 55,454	434,880	
1954	- 290,738	- 2.7	- 270,078	20,420	- 41,080	
1955	35,712	0.3	211,194	48,883	- 224,365	
1956	308,292	1.9	147,112	65,750	95,430	
1957	431,234	2.4	267,668	48,727	114,839	
1958	531,791	2.5	330,432	76,355	125,004	
1959	782,914	3.6	526,739	59,114	197,031	
1960	600,947	2.9	334,353	93,495	173,099	
1961	590,480	2.7	357,155	101,274	132,051	
1962	677,787	2.7	428,785	117,202	117,917	13,829[a]
1963	633,047	2.5	392,644	89,235	121,205	29,963[b]
1964	591,290	2.4	358,641	71,195	104,052	57,402[c]
1965	532,897	2.3	348,357	53,483	93,185	37,872[d]
1966	918,426	2.9	637,194[e]	60,811	133,809	86,612
1967	1,033,706	2.8	673,068[f]	89,224	120,280	151,134
1968	796,296	2.1	524,901[f]	86,397	94,688	90,310
1969	683,215	1.9	461,992[f]	51,015	93,006	77,202
1970	562,786	1.9	365,147[f]	40,819	81,757	75,063
1971	448,699	1.6	304,624[f]	28,205	67,120	48,750
1972	468,330	1.5	315,934[f]	41,320	57,486	53,590
1973	493,952	1.6	344,291[f]	32,677	56,242	60,742
1974	925,012	2.8	742,850[f]	48,297	67,286	66,579
1975	766,063	2.1	576,811[f]	43,388	68,869	76,995
1976	965,160	2.5	784,636[f]	41,858	61,974	76,692
1977	1,244,458	2.7	962,836[f]	65,241	119,117	97,204
1978	1,382,180	2.6	1,052,827[f]	104,090	127,510	97,753
1979	1,493,592	2.6	1,165,361[f]	118,895	107,989	101,347
1980	1,695,844[g]	2.6	1,289,176	138,004	120,847	144,660

TABLE X-12. DEPARTMENT OF DEFENSE MILITARY PRIME CONTRACT AWARDS IN MICHIGAN, FISCAL YEARS: 1951-1983 (cont.)

Year	Amount ($000)	Percentage	Army ($000)	Navy ($000)	Air Force ($000)	Defense Logistics Agency ($000)
1981	1,735,274[g]	2.0	1,165,776	229,298	190,328	142,339
1982	1,572,147[g]	1.5	946,637	248,613	192,998	178,519
1983	1,737,606[g]	1.5	1,033,443	260,151	236,798	164,488

SOURCE: Department of Defense, Military Prime Contract Awards by State, (Washington, D.C.: annually).

a. Includes awards since January 1, 1962, for certain common supplies for which procurement responsibility was transferred from the military department.

b. Procurements by three Department of Defense agencies: the Defense Communication Agency, Office of Civil Defense, and Office of the Secretary of Defense. These agencies are included in procurement statistics for the first time in fiscal year 1963.

c. Procurements by three Department of Defense agencies: the Defense Communication Agency, Office of Civil Defense, and Office of the Secretary of Defense.

d. Procurements by three Department of Defense agencies: the Defense Communication Agency, Office of Civil Defense, and Office of the Secretary of Defense. The Office of Civil Defense is included in totals for the Army beginning in fiscal year 1965.

e. Beginning in fiscal year 1966, other defense agencies, previously listed separately, are shown in totals for the Army.

f. Includes totals for other defense agencies.

g. Total includes all departments shown, plus other defense agencies.

TABLE X-13. NET VALUE OF MILITARY PRIME CONTRACT AWARDS OVER $10,000 IN MICHIGAN, BY PROCUREMENT PROGRAM, FISCAL YEARS: 1981-1983

Procurement program	1981 Value ($000)	1981 Percentage of U.S.	1982 Value ($000)	1982 Percentage of U.S.	1983 Value ($000)	1983 Percentage of U.S.
Airframes & related assemblies & spares	29,727	.3	32,796	.2	19,938	.1
Aircraft engines & related spares	77,511	1.5	38,499	.7	31,768	.6
Other aircraft equiment & supplies	78,123	2.1	67,501	1.8	73,129	1.7
Missile & space systems	85,521	.7	164,581	1.2	182,831	1.1
Ships	14,733	.2	13,842	.1	21,029	.2
Combat vehicles	943,791	27.6	669,487	19.4	540,730	16.5
Noncombat vehicles	91,057	10.1	169,452	11.5	357,318	20.6
Weapons	47,753	2.8	17,517	.7	37,523	1.4
Ammunition	4,529	.2	3,264	.1	9,970	.3
Electronics & ommunication equipment	68,554	.5	46,267	.3	93,437	.5
Petroleum	43,115	.5	47,498	.7	35,543	.6
Other fuels & lubricants	18	--*	112	.2	--	--
Separately procured containers and handling equipment	--	--	11,408	26.6	1,164	4.3
Textiles, clothing, & equipage	5,920	.7	9,929	1.0	9,395	.9
Military building supplies	149	.2	1,302	2.0	734	.9
Subsistence	25,926	1.6	34,362	2.2	30,229	2.8
Transportation equipment	12	.1	16	.1	--	--
Production equipment	7,072	3.7	8,424	3.7	18,583	5.7
Construction	69,275	1.4	48,860	.9	90,855	1.5
Construction equipment	8,605	10.6	23,947	16.7	18,907	6.1
Medical & dental supplies & equipment	12,992	3.7	11,424	2.9	15,015	4.0
Photographic equipment & supplies	286	.2	356	.2	498	.5
Materials handling equipment	10,573	10.4	25,027	13.0	31,795	15.9
All other supplies & equipment	63,558	1.9	66,172	1.7	61,081	1.6
Services	88,496	1.3	77,971	.9	100,691	.9
TOTAL	1,777,296	2.0	1,590,014	1.5	1,782,163	1.5

SOURCE: Department of Defense, Military Prime Contract Awards by Region and State, Fiscal Years 1981, 1982, and 1983, (Washington, D.C.: 1983), Table III-1.

*: Less than .05 percent.

TABLE X-14. EXPENDITURES OF MICHIGAN LOCAL GOVERNMENTS AS DEFINED BY THE BUREAU OF THE CENSUS, FISCAL YEARS: 1972, 1977, 1980, 1981, AND 1982

(In millions of dollars)

Item	1972	1977	1980	1981	1982
General expenditure	5,046.2	7,744.1	10,467.4	10,997.8	11,390.2
Intergovernmental, net	95.0	20.7	19.8	20.9	34.4
Direct expenditure	4,951.3	7,723.4	11,430.0	12,096.8	12,565.6
Education	2,396.6	3,622.6	4,708.6	5,074.0	5,166.6
Higher	100.1	238.6	304.2	389.5	376.0
Local schools	2,296.5	3,384.0	4,404.4	4,684.5	4,790.5
Highways	351.3	507.5	707.2	708.1	660.9
Capital outlay	159.8	193.8	255.1	228.9	195.4
Other	191.5	313.7	452.1	479.2	465.5
Public welfare	141.6	229.3	205.3	177.3	180.8
Health and hospitals	256.2	415.8	835.5	855.4	1,045.9
Police protection	245.0	425.6	588.0	616.6	671.3
Fire protection	107.9	184.1	239.9	267.6	288.8
Sewerage	316.8	291.5	644.6	567.2	556.0
Other sanitation	67.8	92.7	132.0	146.0	144.7
Parks and recreation	87.1	153.3	343.3[a]	289.4	258.6
Urban renewal[b]	81.1	89.0	148.5	247.9	176.1
Airports	26.5	48.7	54.6	45.5	50.8
Correction	32.3	67.8	95.8	121.2	132.2
Libraries	28.7	41.9	57.7	62.1	65.5
Financial administration	60.2	97.6	186.1	193.5	205.9
General control	139.6	232.6	315.1	355.8	376.6
General public buildings	39.1	69.6	106.0	108.6	88.5
Interest on general debt	201.6	298.5	377.5	394.2	401.0
Other	304.3	677.7	649.5	700.5	861.5
Utility expenditure	334.1	513.0	759.4	840.2	905.3
Insurance trust expenditure, Employee retirement	97.9	153.4	203.2	258.7	270.1
TOTAL	5,478.3	8,410.5	11,499.8	12,117.7	12,600.0[c]

SOURCE: Bureau of the Census, U.S. Census of Governments, 1977, vol. 4, Government Finances, no. 5, Compendium of Government Finances (Washington, D.C.: 1972), Table 46; and Bureau of the Census, Government Finances, 1981-1982 (Washington, D.C.: 1983), Series GF-82, no. 5, Table 13.

a. Includes natural resources.

b. Includes housing.

c. Net of duplicative intergovernmental transactions.

TABLE X-15. EXPENDITURES OF THE STATE OF MICHIGAN AS DEFINED BY THE BUREAU OF THE CENSUS, FISCAL YEARS: 1972, 1977, 1980, 1981, AND 1982

(In millions of dollars)

Item	1972	1977	1980	1981	1982
General Expenditure	4,532.0	7,649.3	10,512.8	10,993.0	11,506.5
Intergovernmental expenditure	1,619.1	2,848.3	3,578.3	3,814.8	3,824.8
Direct expenditure	2,912.9	4,800.9	6,934.4	7,178.2	7,681.7
General expenditure by function:					
Educational services:					
Education	867.4	1,296.6	1,734.2	3,833.5	3,864.0
Higher education	714.5	1,038.2	1,426.6	1,510.9	1,596.3
Other education	152.9	258.4	307.7	341.3	390.1
Libraries	n.a.	n.a.	n.a.	17.4	12.2
Social Services:					
Public welfare	948.4	1,767.8	2,500.2	3,031.6	3,254.0
Hospitals	218.6	339.4	523.9	518.6	690.9
Health	44.0	126.1	369.2	542.5	553.0
Emp. security admin.	55.2	99.1	134.0	148.4	150.8
Other	n.a.	n.a.	n.a.	2.4	6.5
Transportation:					
Highways	344.5	392.0	556.2	888.4	894.4
Airports	6.9	13.5	22.8	15.2	16.8
Water transp. & terminals	n.a.	n.a.	n.a.	12.5	8.0
Public safety:					
Correction	50.7	119.2	188.1	212.4	242.1
Police protection	38.5	65.6	110.5	106.1	115.2
Protective inspection	n.a.	n.a.	n.a.	68.7	73.9
Environment and housing					
Natural resources	83.9	91.8	130.0	135.1	140.7
Housing & urban renewal	1.9	4.2	8.2	10.0	11.0
Other	n.a.	n.a.	n.a.	75.8	45.4
Governmental administration:					
Financial administr.	46.4	80.9	106.4	98.3	97.7
General control	40.1	73.5	109.8	115.4	173.1
General public buildings	n.a.	n.a.	n.a.	21.8	25.5
Interest on general debt	57.0	105.1	192.1	239.7	244.6[a]
Other general exp.	109.2	226.0	224.6	899.3	886.5
Insurance trust exp.:	370.6	1,141.3	1,778.8	1,959.5	2,137.3
Unemployment compensation	260.0	842.1	1,416.6	1,577.8	1,576.7
Employee retirement	96.2	269.9	286.4	310.5	371.3
Workmen's compensation	14.4	29.2	75.9	71.4	189.3
Liquor stores exp.	247.7	280.2	342.1	343.1	353.4
EXPENDITURE TOTAL	5,150.3	9,070.8	12,633.6	13,295.5	13,996.8

SOURCE: Bureau of the Census, *U.S. Census of Governments, 1977*, vol. 4, *Compendium of Government Finances* (Washington, D.C.: 1972), Table 46; and Bureau of the Census, *State Government Finances, 1982* (Washington, D.C.: 1983), Series GF-82, no. 3, Table 9.

a. Includes $111,422,000 of State Housing Finance Authority and $59,496,000 of Michigan Hospital Finance Authority.

TABLE X-16. EXPENDITURE OF THE STATE OF MICHIGAN, AS DEFINED BY THE STATE OF MICHIGAN (INCLUDING PAYMENTS FROM THE GENERAL FUND TO INSTITUTIONS OF HIGHER EDUCATION), FISCAL YEARS: 1981-1983

(In thousands of dollars)

Branch and department	1981 expenditures	1982 expenditures	1983 expenditures
General Fund			
Executive	$ 2,083	$ 2,327	$ 2,404
Legislative	42,184	44,382	48,444
Judicial	36,919	82,108	84,517
Management and budget	99,960	118,858	721,055
Attorney General	17,441	18,696	19,586
Civil rights	8,744	9,036	9,434
Civil service	14,362	11,784	11,209
State	62,212	67,196	73,521
Treasury	76,650	221,713	152,788
Colleges and universities	712,199	819,112	876,966
Other education	1,122,975	676,546	783,755
Public health	177,826	184,941	197,108
Mental health	727,460	814,378	632,690
Social services	3,107,645	3,278,681	3,594,205
Corrections	200,461	224,813	230,513
Military affairs	11,950	12,552	14,312
State police	134,094	131,672	135,916
Commerce	80,460	669,816	130,054
Labor	146,918	124,097	158,853
Licensing and regulation	12,103	14,687	14,940
Natural resources	118,791	137,728	153,394
Agriculture	23,723	30,667	33,263
Expenditures not assigned	687,397	8,238	64,370
TOTAL	7,624,557	7,704,307	8,143,129
Special Revenue Funds			
State aeronautic fund	16,649	18,358	24,917
State trunkline fund	452,895	429,958	422,552
State transportation dept. fund	293,754	--	--
Mich. transportation fund	687,516	349,009	354,874
Comprehensive transportation fund	118,258	95,570	85,748
Comprehensive transportation bond constr. fund	31,944	31,133	15,427
State truckline fund, bond proceeds fund	--	--	1,453
Combined transportation total	1,601,020	924,030	904,973
Game and fish protection fund	31,601	1,188	1,956
Michigan state waterways fund	7,871	2,529	2,345
Marine safety fund	3,162	--	10
State park improvement fund	3,252	1,806	2,246
State recreational land acquisition trust fund	13,011	16,607	5,272
Water pollution control bond fund	11,632	14,280	4,088
State sewer construction fund	141	113	--
Hazardous waste management fund	--	267	--
Combined conservation and recreation total	70,672	36,793	15,919

TABLE X-16. EXPENDITURE OF THE STATE OF MICHIGAN, AS DEFINED BY THE STATE OF MICHIGAN (INCLUDING PAYMENTS FROM THE GENERAL FUND TO INSTITUTIONS OF HIGHER EDUCATION), FISCAL YEARS: 1981-1983 (cont.)

(In thousands of dollars)

Branch and department	1981 expenditures	1982 expenditures	1983 expenditures
Special Revenue Funds (cont.)			
Counter-cyclical budget and economic stabilization fund	$ 16,289	--	--
Michigan employment security act Administration fund	151,049	$ 136,869	$ 140,653
Michigan veterans' benefit (trust) fund	5,127	3,774	3,316
School aid fund	1,811,107	1,654,628	1,711,675
Motor vehicle accident claims fund	1,885	--	--
Safety education & training fund	1,519	--	--
Vietnam veteran era bonus fund	2,000	--	--
State lottery fund	506,733	325,490	336,211
School bond loan fund	5,260	4,266	2,538
State campaign fund	--	5,687	78
State construction code fund	1,951	262	26
Children's trust fund	--	--	34
Michigan justice training fund	--	--	2,351
Construction loss recovery fund	--	--	--
Combined misc. total	2,502,922	2,130,978	2,196,874
TOTAL	11,799,171	10,796,108	11,260,895

SOURCE: Michigan Department of Management and Budget, State of Michigan Financial Report, 1981, 1982 and 1983 (Lansing: annually).

TABLE X-17. ASSESSED VALUATIONS OF MICHIGAN'S COUNTIES APPROVED BY BOARD OF REVIEW, STATE TAX COMMISSION: 1981, 1982 AND 1983

(In thousands of dollars)

County	Real property			Personal property		
	1981[c]	1982	1983	1981[c]	1982	1983
Alcona	188,730	181,605	202,261	6,160	6,297	6,693
Alger	83,371	62,560	70,813	9,565	9,849	10,142
Allegan	667,447	725,297	767,488	97,988	106,217	112,411
Alpena	294,983	301,104	314,753	44,466	45,802	46,232
Antrim[a]	290,133	304,261	322,050	12,283	12,954	14,034
Arenac	165,554	174,767	186,575	9,571	10,117	11,014
Baraga	57,272	46,773	64,122	6,460	6,566	6,592
Barry	354,345	368,272	380,335	24,074	25,623	25,944
Bay	1,231,710	1,265,235	1,272,388	109,656	106,148	105,390
Benzie	158,089	165,860	178,790	7,166	7,324	7,988
Berrien[a]	1,606,813	1,645,671	1,699,905	212,978	228,589	226,224
Branch	345,463	358,751	367,088	27,342	30,227	28,966
Calhoun	966,957	986,500	1,028,186	147,640	160,046	166,607
Cass	446,442	440,268	482,704	34,764	34,204	36,112
Charlevoix	310,901	334,277	350,008	24,428	27,696	29,962
Cheboygan	246,128	255,246	271,020	20,194	20,867	21,088
Chippewa	226,645	221,451	231,780	19,038	19,836	20,550
Clare	241,087	243,415	258,416	44,598	47,392	52,813
Clinton	497,659	511,931	539,243	34,281	36,637	37,954
Crawford	130,417	141,114	144,526	11,211	12,976	13,686
Delta	261,143	261,184	283,139	58,737	58,527	60,259
Dickinson	199,963	214,678	222,822	23,862	25,075	26,621
Eaton	767,163	844,167	872,972	58,578	73,498	90,732
Emmet	326,586	328,758	365,175	34,645	33,199	33,628
Genesee	3,551,152	3,752,944	3,735,328	573,049	563,504	561,205

TABLE X-17. ASSESSED VALUATIONS OF MICHIGAN'S COUNTIES APPROVED BY BOARD OF REVIEW, STATE TAX COMMISSION: 1981, 1982 AND 1983 (cont.)

(In thousands of dollars)

	Real property			Personal property		
County	1981[c]	1982	1983	1981[c]	1982	1983
Gladwin	205,518	162,660	176,584	12,249	17,207	15,143
Gogebic	114,744	124,777	129,031	22,101	29,489	29,832
Grand Traverse	682,809	624,224	749,261	71,567	77,299	77,856
Gratiot	335,876	375,938	395,059	37,359	36,411	37,651
Hillsdale[a]	402,366	407,837	400,622	24,786	27,488	26,351
Houghton	187,506	200,142	202,852	28,871	28,114	27,058
Huron[a]	592,637	634,197	676,815	31,338	33,952	36,094
Ingham	1,958,482	2,140,253	2,236,960	293,863	320,487	326,494
Ionia	347,945	374,309	380,627	29,896	30,639	33,091
Iosco	272,543	274,847	290,741	20,453	20,197	20,190
Iron	126,232	132,893	128,268	18,775	20,261	21,058
Isabella	347,994	377,273	391,758	31,388	33,991	37,605
Jackson[a]	1,042,067	1,081,112	1,068,503	153,052	157,781	153,864
Kalamazoo	1,775,397	1,890,898	2,001,016	242,079	258,728	276,598
Kalkaska	148,066	157,693	169,447	65,605	84,822	85,012
Kent[a]	3,546,456	3,907,932	4,102,978	474,833	517,287	550,354
Keweenaw	24,290	21,869	24,210	3,916	3,318	3,735
Lake	137,761	133,798	146,803	5,235	5,830	7,007
Lapeer	630,628	670,768	685,412	44,559	51,263	51,315
Leelanau	327,198	341,238	359,571	9,662	10,319	11,073
Lenawee	860,261	936,673	931,067	88,697	100,875	97,617
Livingston[a]	1,090,569	1,174,512	1,178,418	95,819	102,474	101,266
Luce	48,838	39,019	42,710	1,956	2,070	2,294
Mackinac	143,559	137,837	155,667	28,571	32,418	33,319
Macomb	6,521,308	6,776,671	6,816,945	795,824	843,972	868,783

TABLE X-17. ASSESSED VALUATIONS OF MICHIGAN'S COUNTIES APPROVED BY BOARD OF REVIEW, STATE TAX COMMISSION: 1981, 1982 AND 1983 (cont.)

(In thousands of dollars)

County	Real property			Personal property		
	1981[c]	1982	1983	1981[c]	1982	1983
Manistee	219,809	182,655	232,261	62,650	71,010	69,613
Marquette[a]	596,525	591,155	576,248	54,347	57,064	57,350
Mason	459,730	497,959	514,920	43,222	42,280	43,612
Mecosta	281,652	296,772	317,708	39,941	43,134	44,472
Menominee	192,583	203,660	223,517	14,952	16,665	16,702
Midland	798,218	836,895	889,365	469,994	521,678	573,337
Missaukee	122,090	124,259	137,457	17,742	19,413	25,945
Monroe	1,619,683	1,699,750	1,804,545	151,730	167,581	182,100
Montcalm[a]	365,443	388,966	410,912	50,416	54,709	59,968
Montmorency[a]	123,181	117,641	122,563	4,772	4,800	5,157
Muskegon[b]	1,060,806	1,110,316	1,134,281	132,251	138,012	151,982
Newaygo	322,113	314,323	347,185	28,358	30,072	34,345
Oakland	12,129,752	12,527,708	12,772,683	1,118,074	1,198,002	1,231,959
Oceana	215,478	217,282	229,211	11,643	11,917	11,388
Ogemaw	196,453	202,749	208,590	16,851	17,624	18,222
Ontonagon	86,725	90,950	89,472	11,553	11,404	11,468
Osceola[b]	186,315	192,250	198,762	38,139	38,458	43,425
Oscoda	99,248	86,684	106,762	6,560	6,279	6,763
Otsego	235,857	210,531	255,461	49,039	50,167	70,105
Ottawa	1,609,164	1,768,884	1,841,695	136,766	157,045	163,508
Presque Isle	170,712	170,289	175,645	19,688	20,171	20,040
Roscommon	272,403	287,422	303,529	16,988	18,240	17,902
Saginaw	1,893,423	1,964,421	1,998,968	285,186	283,637	276,784
St. Clair	1,675,221	1,652,377	1,699,857	216,588	198,530	228,233
St. Joseph	506,742	519,541	533,737	56,764	58,459	59,503

TABLE X-17. ASSESSED VALUATIONS OF MICHIGAN'S COUNTIES APPROVED BY BOARD OF REVIEW, STATE TAX COMMISSION: 1981, 1982 AND 1983 (cont.)

(In thousands of dollars)

County	Real property 1981[c]	Real property 1982	Real property 1983	Personal property 1981[c]	Personal property 1982	Personal property 1983
Sanilac	467,916	496,010	498,341	25,120	26,224	26,495
Schoolcraft[a]	74,019	69,613	73,727	12,536	13,446	13,715
Shiawassee	534,998	565,395	567,788	40,412	41,439	41,019
Tuscola[a]	538,066	566,204	602,913	35,767	36,489	37,348
Van Buren	523,549	541,857	569,952	59,237	60,914	67,317
Washtenaw	2,758,711	2,840,494	2,867,103	347,772	370,033	395,279
Wayne	15,448,749	15,829,168	15,675,162	2,684,371	2,654,110	2,259,876
Wexford	219,823	205,707	226,912	22,121	23,396	22,604
TOTAL	81,492,349	84,605,350	86,665,444	10,566,786	11,018,264	11,302,045

SOURCE: Michigan State Tax Commission, special release.

a. Counties for which the county equalized valuation was not adopted by the State Tax Commission. (1980 and 1981)

b. Amended to recognize county equalization petition and stipulation filed with Michigan Tax Tribunal prior to May 26, 1981. (1980 and 1981)

c. State equalized value.

TABLE X-18. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1982

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate	Taxes
Adrian	170,780,100	913,930	2,561,707	7,088,364	61.86	10,564,000
Albion	55,949,906	339,056	633,118	2,150,714	55.82	3,122,889
Algonac	35,333,170	218,005	528,941	1,168,822	54.22	1,915,768
Allegan	41,570,791	240,271	498,849	1,109,121	44.46	1,848,242
Allen Park	400,296,750	2,930,172	6,277,713	16,014,802	63.01	25,222,687
Alma	69,769,500	390,709	1,073,755	2,852,177	61.87	4,316,641
Alpena	144,411,200	1,156,734	2,774,139	4,704,917	59.80	8,635,790
Ann Arbor	1,300,066,961	1,661,512	20,225,202	49,766,563	59.73	77,653,277
Auburn	17,872,600	146,062	161,329	678,055	55.14	985,446
Au Gres	10,075,100	61,861	159,425	257,521	47.52	478,806
Bad Axe	32,768,500	134,351	351,278	742,829	37.49	1,228,458
Bangor	11,636,183	73,886	179,197	400,629	56.18	653,713
Battle Creek	275,552,010	1,669,845	4,509,133	12,139,085	66.48	18,318,064
Bay City	293,042,203	2,394,858	7,033,013	11,000,248	69.71	20,428,118
Beaverton	7,348,176	53,021	130,210	220,739	54.98	403,970
Belding	34,410,000	172,669	497,500	1,131,735	52.37	1,801,904
Belleville	25,902,380	189,805	372,994	1,002,422	60.42	1,565,022
Benton Harbor	49,688,990	266,840	1,823,589	1,790,215	78.10	3,880,644
Berkley	157,381,400	808,264	2,721,836	6,958,874	66.65	10,488,974
Bessemer	11,974,367	77,833	191,471	426,527	58.11	695,832
Big Rapids	58,307,100	381,457	502,082	1,907,808	47.87	2,791,347
Birmingham	448,461,577	2,303,164	6,787,246	14,570,427	52.76	23,660,837
Bloomfield Hills	202,383,282	1,039,380	1,958,952	6,185,660	45.38	9,183,992
Boyne City	30,315,950	137,938	543,565	1,063,787	57.57	1,745,289
Bridgman	25,519,288	137,044	459,347	308,202	35.45	904,592

TABLE X-18. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1982 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate	Taxes
Brighton	66,617,861	359,950	1,149,158	2,704,952	63.26	4,214,059
Bronson	15,644,879	107,950	224,774	545,016	57.38	897,739
Brown City	8,438,980	39,303	139,665	245,996	50.36	424,964
Buchanan	44,272,060	237,750	619,809	1,535,134	54.05	2,392,692
Burton	275,360,750	1,848,827	2,220,983	10,832,918	54.12	14,902,728
Cadillac	81,504,900	611,287	1,418,185	2,952,923	61.13	4,982,395
Carson City	8,343,650	45,056	133,315	297,102	56.99	475,473
Caspian	5,327,403	42,353	103,884	171,875	59.71	318,112
Cedar Springs	14,145,900	67,900	169,751	460,789	49.37	698,440
Center Line	102,698,579	461,435	1,974,894	4,209,466	64.71	6,645,795
Charlevoix	52,456,650	238,678	708,165	1,515,473	46.94	2,462,315
Charlotte	65,968,900	345,407	1,103,660	2,212,597	55.51	3,661,663
Cheboygan	41,674,880	239,214	708,473	1,228,515	52.22	2,176,202
City of Manton	7,382,389	55,367	95,971	221,324	50.48	372,664
Clare	28,137,352	148,132	436,129	1,020,823	57.04	1,605,084
Clawson	144,644,1092	742,849	1,740,057	6,281,720	60.59	8,764,626
Clio	17,044,150	114,438	249,042	565,525	54.51	929,005
Coldwater	76,125,542	525,266	1,092,401	2,836,438	58.51	4,454,105
Coleman	6,958,752	30,619	131,451	268,608	61.89	430,677
Coloma	13,563,800	72,840	217,021	457,927	55.13	747,789
Coopersville	26,483,141	104,182	410,504	900,469	53.44	1,415,155
Corunna	22,169,700	150,865	344,741	759,933	56.63	1,255,540
Croswell	15,268,689	71,106	298,674	476,841	55.45	846,621
Crystall Falls	11,079,850	88,085	155,757	326,770	51.50	570,612
Davison	43,686,880	293,323	513,325	1,648,751	56.20	2,455,399

TABLE X-18. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1982 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total Rate	Total Taxes
Dearborn	1,878,516,089	13,750,738	28,177,833	49,600,370	48.72	91,528,941
Dearborn Heights	647,804,170	4,741,927	8,429,231	22,804,958	55.54	35,976,115
Detroit	5,364,930,040	39,271,288	175,420,788	208,427,532	78.87	423,119,608
Dewitt	28,509,325	146,524	363,494	1,251,990	61.80	1,762,007
Dowagiac	42,286,340	229,103	778,069	1,223,805	52.76	2,230,977
Durand	26,308,005	179,026	379,943	906,662	55.71	1,465,631
East Detroit	325,640,838	1,463,137	5,098,690	13,771,027	62.44	20,332,854
East Grand Rapids	145,525,200	698,521	2,151,415	6,040,402	61.09	8,890,338
East Jordan	18,170,400	82,675	290,726	653,044	56.49	1,026,446
East Lansing	279,845,201	2,034,475	4,981,245	13,171,479	72.14	20,187,198
East Tawas	24,706,866	111,181	336,013	620,143	43.20	1,067,338
Eaton Rapids	32,761,100	171,534	457,730	1,105,360	53.25	1,774,624
Ecorse	221,036,224	1,617,985	4,895,952	6,753,130	60.02	13,267,068
Escanaba	102,913,100	534,963	1,595,166	3,953,921	59.12	6,084,050
Essexville	41,389,175	338,249	563,994	781,011	40.67	1,683,253
Evart	17,535,450	96,445	236,904	511,158	48.16	844,507
Farmington	153,897,401	790,371	1,659,783	5,686,017	52.87	8,136,171
Farmington Hills	950,916,328	4,883,621	7,441,420	35,375,762	50.16	47,700,803
Fennville	8,768,980	50,683	123,156	296,148	53.60	469,987
Fenton	87,260,621	585,885	1,308,351	3,623,341	63.23	5,517,577
Ferndale	206,089,258	1,058,413	4,925,533	9,306,165	74.19	15,290,111
Ferrysburg	30,670,570	120,655	234,580	961,823	42.94	1,317,057
Flat Rock	132,545,390	970,232	1,855,635	4,723,277	56.96	7,549,145
Flint	1,515,981,790	10,178,605	16,105,651	66,265,733	61.05	92,549,988
Flushing	87,580,579	588,034	823,257	3,004,030	50.41	4,415,321

TABLE X-18. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1982 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate	Taxes
Frankenmuth	62,967,175	420,621	573,001	1,825,418	44.77	2,819,040
Frankfort	15,335,400	88,792	284,012	362,682	47.96	735,486
Fraser	170,640,494	766,705	2,562,314	7,721,482	64.75	11,049,501
Fremont	46,169,963	266,719	554,040	1,614,282	52.74	2,435,041
Gaastra	1,432,959	11,392	32,958	46,231	63.21	90,581
Galesburg	10,383,893	60,818	103,839	423,751	56.67	588,408
Garden City	270,281,530	1,978,461	4,388,129	11,939,578	67.73	18,306,168
Gaylord	41,531,600	178,586	446,465	1,096,850	41.46	1,721,900
Gilbraltar	63,824,520	467,195	1,244,578	2,811,470	70.87	4,523,244
Gladstone	27,007,400	140,390	458,850	983,945	58.62	1,583,186
Gladwin	19,638,191	103,101	393,184	606,035	56.13	1,102,319
Gobles	4,458,625	28,311	80,255	149,980	57.99	258,546
Grand Blanc	85,189,440	571,979	800,781	3,191,196	53.57	4,563,956
Grand Haven	127,573,770	501,862	1,744,008	4,000,688	48.96	6,246,558
Grand Ledge	47,801,409	250,283	739,387	1,945,044	61.39	2,934,714
Grand Rapids	1,492,639,080	7,256,880	14,167,155	52,443,351	49.49	73,867,385
Grandville	138,377,800	664,213	1,245,400	4,785,976	48.39	6,695,590
Grant	4,963,208	28,672	59,956	169,214	51.95	257,854
Grayling	21,934,000	174,814	290,626	633,235	50.09	1,098,674
Greenville	72,379,500	390,849	1,139,988	2,272,535	52.55	3,803,373
Grosse Point	126,931,272	929,137	2,038,719	3,809,004	53.53	6,776,861
Grosse Pte. Farms	263,568,181	1,929,319	3,350,373	7,909,259	50.04	13,188,952
Grosse Pte. Park	199,598,650	1,461,062	3,353,577	5,989,636	54.13	10,804,275
Grosse Pte. Woods	327,249,450	2,395,466	4,244,949	9,819,358	50.30	16,459,773
Hamtramck	111,190,210	813,912	2,612,970	3,969,491	66.52	7,396,373

TABLE X-18. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1982 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate	Taxes
Hancock	31,352,756	244,551	656,343	956,259	59.23	1,857,154
Harbor Beach	25,618,960	105,038	456,863	623,555	46.27	1,183,456
Harbor Springs	29,542,559	165,438	264,258	693,660	38.03	1,123,356
Harper Woods	198,539,370	1,453,308	4,387,829	5,506,235	57.15	11,347,372
Harrison	16,852,840	88,723	235,603	498,170	48.80	822,496
Harrisville	5,797,966	29,170	44,465	130,164	35.15	203,799
Hart	14,961,200	94,778	206,465	424,406	48.50	725,648
Hartford	11,164,668	70,892	230,913	451,740	67.49	753,546
Hastings	56,049,200	329,009	872,027	1,729,678	52.29	2,930,714
Hazel Park	138,506,737	711,329	3,465,778	5,847,009	72.44	10,034,116
Highland Park	145,883,850	1,067,870	4,499,058	6,604,162	83.43	12,171,090
Hillsdale	56,231,939	286,294	899,711	1,815,330	53.37	3,001,335
Holland	294,610,949	1,303,589	3,731,366	10,665,714	53.29	15,700,670
Houghton	29,420,755	229,482	441,311	938,522	54.70	1,609,315
Howell	72,220,037	390,219	1,137,408	2,923,034	61.63	4,450,661
Hudson	18,851,344	100,883	206,254	728,227	54.92	1,035,365
Hudsonville	40,693,696	160,085	258,812	1,396,241	44.60	1,815,138
Huntington Woods	91,815,094	471,535	1,906,124	4,042,566	69.93	6,420,225
Imlay City	24,462,082	123,157	320,422	807,493	51.14	1,251,072
Inkster	175,272,852	1,282,997	4,171,494	7,488,705	73.85	12,943,196
Ionia	38,081,500	191,093	590,263	1,098,149	49.35	1,879,505
Iron Mountain	72,015,300	307,125	1,386,295	2,535,620	61.50	4,429,039
Iron River	16,173,385	128,580	339,641	521,790	61.21	990,012
Ironwood	38,770,741	252,010	893,127	1,419,785	66.16	2,564,921
Ishpeming	51,173,550	296,807	1,151,405	1,571,028	59.00	3,019,239

TABLE X-18. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1982 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate	Taxes
Ithaca	19,105,206	106,989	295,177	613,749	53.17	1,015,916
Jackson	275,042,900	1,844,878	3,878,577	12,582,105	66.56	18,305,560
Kalamazoo	637,457,900	3,733,591	11,785,322	27,332,152	67.22	42,851,065
Keego Harbor	23,527,718	120,831	448,114	897,178	62.31	1,466,123
Kentwood	366,241,470	1,757,959	2,032,352	13,321,508	46.72	17,111,819
Kingsford	52,806,600	371,859	897,712	1,639,772	55.09	2,909,343
Laingsburg	5,511,770	37,508	114,314	190,641	62.13	342,463
Lake City	8,881,087	43,696	119,186	240,056	45.37	402,938
Lansing	1,144,101,450	8,269,273	13,936,426	50,016,984	63.13	72,222,683
Lapeer	59,173,968	297,918	565,219	1,993,571	48.28	2,856,708
Lathrup Village	74,510,312	382,663	1,032,715	2,778,996	56.29	4,194,374
Leslie	13,113,402	95,344	199,979	546,829	64.22	842,143
Lincoln Park	342,633,080	2,508,074	6,441,502	11,426,813	59.47	20,376,389
Litchfield	13,679,407	69,646	129,272	478,277	49.50	677,195
Livonia	1,585,585,316	11,606,485	18,670,423	65,148,474	60.18	95,425,382
Lowell	30,772,950	147,710	350,196	1,041,658	50.03	1,539,565
Ludington	82,540,340	399,867	1,480,774	1,895,126	45.74	3,775,767
Luna Pier	46,249,075	275,876	670,612	1,512,960	53.18	2,459,447
Mackinac Island	20,618,735	89,692	235,054	410,804	35.67	735,549
Madison Heights	396,621,082	2,036,927	5,412,188	16,128,525	59.45	23,577,639
Mainstee	56,044,460	334,026	1,120,236	1,653,872	55.46	3,108,134
Manistique	23,591,550	144,616	471,831	808,010	60.38	1,424,457
Marine City	39,394,900	243,067	825,323	1,118,027	55.50	2,186,417
Marquette	262,450,974	1,322,216	2,838,232	8,259,332	48.08	12,619,780
Marshall	67,971,810	411,909	1,290,127	2,889,485	67.55	4,591,521

TABLE X-18. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1982 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate	Taxes
Marysville	147,155,975	907,952	1,839,450	4,845,846	51.60	7,593,248
Mason	48,605,200	353,360	626,035	2,026,837	61.85	3,006,232
McBain	3,884,700	19,113	57,098	126,982	52.31	203,194
Melvindale	111,202,070	813,999	2,582,112	4,142,277	67.79	7,538,388
Memphis	8,158,506	41,025	148,689	266,903	55.97	456,618
Menominee	71,606,320	517,012	1,255,223	2,414,587	58.47	4,186,822
Midland	1,038,750,000	4,572,403	8,580,075	25,752,083	37.45	38,904,560
Milan	50,508,163	298,848	609,443	1,901,657	55.63	2,809,948
Monroe	524,681,825	3,129,727	6,085,019	16,748,992	49.48	25,963,739
Montague	18,075,950	115,686	298,253	693,121	61.24	1,107,060
Montrose	11,187,776	75,117	128,659	378,594	52.05	582,371
Morenci	15,336,600	82,074	197,321	514,390	51.76	793,784
Mt. Clemens	174,268,273	783,005	3,467,939	8,675,804	74.18	12,926,747
Mt. Morris	20,747,332	139,302	365,775	778,232	61.85	1,283,310
Mt. Pleasant	123,106,000	862,973	1,693,089	4,743,274	59.29	7,299,336
Munising	22,411,679	160,245	500,900	751,913	63.05	1,413,058
Muskegon	318,679,200	20,39,547	5,020,153	13,475,057	64.44	20,534,757
Muskegon Heights	69,535,446	445,027	1,156,479	2,976,264	65.83	4,577,770
Megaunee	29,923,500	173,556	660,911	629,836	48.93	1,464,303
New Baltimore	51,500,812	231,398	1,018,918	1,776,778	58.78	3,027,094
New Buffalo	21,527,357	115,606	389,430	648,512	53.59	1,153,548
Newaygo	9,451,479	54,600	132,326	319,875	53.62	506,801
Niles	102,161,850	548,630	1,879,778	3,910,245	62.05	6,338,652
North Muskegon	51,810,071	331,584	562,139	2,143,901	58.63	3,037,624
Northville	85,290,200	542,810	1,482,345	3,577,071	65.68	5,602,225

TABLE X-18. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1982 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate	Taxes
Norton Shores	212,632,259	1,360,846	1,678,817	7,849,884	51.21	10,839,547
Norway	21,782,350	153,389	315,422	625,143	50.22	1,093,954
Novi	425,797,219	2,186,767	3,760,428	16,410,408	52.51	22,357,603
Oak Park	291,127,985	1,495,146	7,237,318	13,324,980	75.77	22,057,444
Olivet	6,382,500	33,418	73,166	225,685	52.06	332,270
Omer	1,936,692	11,891	29,051	61,014	52.64	101,956
Onaway	6,230,010	33,206	124,600	151,140	49.59	308,946
Orchard Lk. Vill.	37,619,694	295,917	602,702	2,186,930	53.55	3,085,549
Otesgo	41,506,500	239,899	456,572	1,248,947	46.87	1,945,418
Owosso	106,566,809	725,187	1,760,464	3,295,898	54.25	5,781,550
Parchment	34,382,950	201,381	361,023	1,554,453	61.57	2,116,857
Perry	12,670,622	86,224	189,951	407,715	53.97	683,891
Peteesburg	7,173,100	42,788	168,295	260,240	65.71	471,323
Petoskey	69,395,975	388,617	803,129	2,271,331	49.90	3,463,077
Pinconning	11,417,300	93,307	210,302	386,586	60.45	690,195
Plainwell	32,962,033	190,514	461,468	1,221,731	56.84	1,873,714
Pleasant Ridge	40,250,554	206,715	775,931	1,857,032	70.55	2,839,678
Plymouth	147,784,285	1,081,781	2,431,061	5,991,175	64.31	9,504,017
Pontiac	713,162,712	3,662,590	17,746,056	28,947,560	70.61	50,356,205
Port Huron	286,408,600	1,767,153	4,788,783	10,895,062	60.93	17,450,998
Portage	490,629,218	2,873,615	4,832,130	19,058,933	54.55	26,764,678
Portland	25,582,500	128,373	383,737	784,367	50.68	1,296,478
Potterville	7,838,964	41,044	117,584	321,792	61.29	480,420
Reading	5,925,794	30,170	85,924	184,490	50.72	300,584
Reed City	15,301,015	84,156	260,122	443,177	51.46	787,395

TABLE X-18. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1982 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate	Taxes
Richmond	28,446,982	127,815	450,885	1,014,135	55.99	1,592,835
River Rouge	256,326,340	1,876,309	5,818,608	7,323,244	58.59	15,018,160
Riverview	167,089,180	1,223,093	2,909,023	7,516,173	69.71	11,648,288
Rochester	117,407,718	602,971	1,524,997	4,688,889	58.06	6,816,856
Rockford	32,001,900	153,609	393,623	1,086,593	51.05	1,633,825
Rockwood	30,082,860	220,207	586,616	1,325,150	70.87	2,131,972
Rogers City	35,661,289	190,075	638,337	975,692	50.59	1,804,104
Romulus	315,781,950	2,311,524	3,363,078	13,987,129	62.26	19,660,731
Roosevelt Park	47,707,200	305,326	461,300	1,755,625	52.87	2,522,251
Rose City	5,884,588	38,059	93,770	182,975	53.50	314,804
Roseville	473,190,528	2,126,092	7,116,786	19,340,329	60.41	28,583,207
Royal Oak	712,136,286	3,657,318	9,850,055	29,283,500	60.09	42,790,874
Saginaw	618,021,829	4,128,386	6,563,397	27,007,770	61.00	37,699,552
Saline	100,335,143	591,292	863,568	3,763,571	52.01	5,218,431
Sandusky	22,510,562	104,832	416,446	593,555	49.52	1,114,832
Sault Ste Marie	84,622,797	562,742	2,039,433	3,080,270	67.15	5,682,444
Scottville	10,124,420	49,048	188,985	361,720	59.24	599,753
South Haven	51,005,850	323,872	839,556	1,649,019	55.14	2,812,447
South Lyon	48,559,072	249,385	859,861	1,805,756	60.03	2,915,002
Southfield	1,386,337,426	7,119,813	23,842,231	52,532,479	60.23	83,494,523
Southgate	281,267,400	2,058,877	6,103,503	11,397,559	69.54	19,559,939
Springfield	56,112,600	340,042	996,223	2,420,429	66.95	3,756,695
St. Clair	57,639,150	355,634	1,045,574	1,635,799	52.69	3,037,007
St. Clair Shores	729,893,090	3,279,483	12,730,795	28,610,812	61.13	44,621,090
St. Ignace	22,107,886	96,169	340,461	652,183	49.25	1,088,813

TABLE X-18. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1982 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate	Taxes
St. Johns	67,475,500	346,790	898,774	2,249,304	51.79	3,494,868
St. Joseph	120,595,000	647,619	2,247,645	4,837,228	64.12	7,732,492
St. Louis	18,217,897	102,020	258,694	671,820	56.68	1,032,534
Stambaugh	8,056,571	64,049	128,905	259,924	56.21	452,878
Standish	13,793,250	84,691	262,072	405,104	54.51	751,866
Stanton	6,989,500	37,743	83,875	254,509	53.81	376,127
Stephenson	6,633,045	47,892	16,387	170,756	35.43	235,033
Sterling Hts	1,374,590,985	6,176,175	15,931,510	57,001,878	57.55	79,109,562
Sturgis	90,367,625	430,150	1,012,117	3,058,312	49.80	4,500,579
Swartz Creek	65,888,525	442,389	583,133	2,563,064	54.46	3,588,566
Sylvan Lake	27,648,378	141,994	325,282	1,111,232	57.09	1,578,508
Tawas City	18,472,800	83,128	275,984	463,667	44.54	822,779
Taylor	595,536,756	4,359,329	13,608,074	24,488,471	71.29	42,455,875
Tecumseh	73,702,700	394,420	847,581	2,729,948	53.89	3,971,949
Three Rivers	64,070,465	304,975	1,043,708	2,088,249	53.64	3,436,932
Traverse City	211,465,901	1,278,290	2,421,193	6,640,382	48.90	10,339,866
Trenton	455,226,420	3,332,257	6,829,225	19,388,476	64.91	29,549,958
Troy	1,349,164,859	6,928,906	14,638,439	51,833,435	54.40	73,400,780
Utica	45,437,753	204,156	817,880	1,950,188	65.41	2,972,224
Vassar	22,170,800	108,637	411,224	609,919	50.96	1,129,780
Wakefield	9,798,250	63,689	211,642	361,263	64.97	636,594
Walker	191,641,600	919,880	958,208	6,425,838	43.33	8,303,925
Walled Lake	51,686,024	265,444	907,400	1,950,775	60.43	3,123,619
Warren	2,064,321,674	9,275,204	26,466,462	87,035,415	59.48	122,777,080
Watervliet	12,356,793	66,358	198,535	402,043	53.97	666,936

TABLE X-18. STATE EQUALIZED VALUATIONS AND PROPERTY TAX LEVIES IN MICHIGAN CITIES: 1982 (cont.)

City	State equalized valuation	County taxes	City taxes	School taxes	Total	
					Rate	Taxes
Wayland	16,913,886	97,759	222,722	544,642	51.15	865,123
Wayne	229,876,430	1,682,695	4,091,823	11,276,942	74.18	17,051,460
West Branch	19,036,081	123,116	339,035	591,906	55.37	1,054,056
Westland	646,949,320	4,735,669	11,024,789	30,326,652	71.24	46,087,110
White Cloud	7,400,482	42,752	114,707	244,911	54.37	402,370
Whitehall	36,643,083	234,516	476,360	1,531,682	61.20	2,242,558
Whittemore	3,186,312	14,338	23,714	87,241	39.32	125,293
Williamston	21,919,551	159,355	372,632	1,058,714	72.57	1,590,702
Wixom	141,518,695	726,798	1,176,204	5,339,993	51.18	7,242,994
Woodhaven	175,939,570	1,287,888	2,445,560	7,486,546	63.77	11,219,983
Wyandotte	301,327,280	2,205,716	5,631,807	13,186,082	69.77	21,023,604
Wyoming	647,416,700	3,107,600	5,282,921	22,552,505	47.79	30,943,026
Yale	13,184,551	81,350	171,399	366,003	46.93	618,752
Ypsilanti	177,033,937	1,042,291	4,199,245	8,166,576	75.74	13,409,111
Zeeland	69,914,900	275,038	699,156	913,087	47.44	3,317,098
Zilwaukee	20,894,433	139,575	301,925	913,087	64.83	1,354,586
STATE TOTAL	49,958,916,427	303,375,322	811,269,198	1,901,149,837	60.37	3,015,794,357

SOURCE: Michigan Department of Treasury, State Tax Commission, special release.

TABLE X-19. HISTORY OF OUTSTANDING DEBT OF LOCAL GOVERNMENTS IN MICHIGAN: 30 JUNE 1948 THROUGH 30 JUNE 1982

(In thousands of dollars)

June 30	Approved during year	Gross debt outstanding	Increase (+) or decrease(-) over preceding year
1948	36,722	441,897	+1,234
1949	84,573	467,039	+25,142
1950	126,226	542,510	+75,471
1951	125,461	581,894	+39,383
1952	202,511	646,012	+64,117
1953	214,838	702,292	+56,279
1954	184,185	820,966	+118,674
1955	179,566	908,472	+87,506
1956	290,451	1,052,676	+144,203
1957	293,913	1,196,846	+144,170
1958	255,835	1,317,220	+120,373
1959	410,698	1,520,304	+203,084
1960	421,284	1,662,906	+142,602
1961	398,507	1,787,002	+124,096
1962	521,376	1,993,658	+206,656
1963	291,348	2,099,554	+105,896
1964	379,377	2,311,606	+212,051
1965	391,750	2,502,027	+190,421
1966	526,918	2,783,167	+287,140
1967	635,432	3,168,082	+384,914
1968	680,783	3,671,601	+503,519
1969	748,673	3,986,009	+314,408
1970	844,074	4,494,679	+508,669
1971	1,268,020	5,104,755	+610,076
1972	1,207,075	5,541,270	+436,514
1973	993,239	5,842,602	+301,331
1974	1,129,697	6,376,186	+533,584
1975	1,368,630	6,844,035	+467,848
1976	1,679,225	7,467,859	+623,824
1977	1,006,121	7,841,682	+373,823
1978	1,749,929	8,506,599	+664,917
1979	2,249,641	9,776,082	+1,269,483
1980	2,446,044	10,461,678	+685,596
1981	2,285,220	10,971,352	+509,674
1982	2,426,884	11,517,461	+546,109

SOURCE: Michigan Department of Treasury, special release.

TABLE X-20. GOVERNMENT EMPLOYMENT AND PAYROLLS IN MICHIGAN, BY TYPE OF GOVERNMENT, FOR COUNTIES HAVING 100,000 POPULATION OR MORE AND FOR CITIES HAVING 50,000 POPULATION OR MORE: OCTOBER 1982

	Number of employees			October	
Type of government	Full-time only	Full-time equivalent	Total	payroll ($000)	Average earnings[a]
State	98,773	113,591	148,262	214,078	1,903
Local	259,838	278,894	359,145	528,287	1,899
Counties	38,547	40,722	44,652	62,854	1,550
Municipalities	60,676	62,911	77,018	117,324	1,862
Townships	6,563	7,822	19,633	13,204	1,725
School dist	147,445	160,229	208,948	321,379	2,015
Special dist	6,607	7,210	8,894	13,525	1,871
TOTAL STATE AND LOCAL	358,611	392,485	507,407	742,365	1,900
Counties					
Bay	678	752	867	1,089	1,482
Berrien[b]	1,170	1,249	1,370	1,485	1,206
Calhoun[b]	569	584	615	915	1,568
Genesee	1,567	1,630	1,658	3,055	1,891
Ingham	2,208	2,495	2,807	3,720	1,493
Jackson	731	756	800	1,025	1,359
Kalamazoo	760	800	851	1,311	1,647
Kent	1,977	2,048	2,232	3,172	1,551
Livingston	382	389	403	556	1,428
Macomb	2,045	2,163	2,406	3,418	1,593
Monroe	688	683	728	1,085	1,590
Muskegon	902	982	1,143	1,427	1,464
Oakland	3,318	3,431	3,725	6,523	1,906
Ottawa	501	513	563	835	1,620
Saginaw	1,285	1,349	1,460	2,015	1,498
St. Clair	685	741	855	1,201	1,635
Washtenaw	1,180	1,219	1,426	1,904	1,569
Wayne	4,908	4,989	5,230	10,218	2,048
Cities					
Ann Arbor	852	889	1,076	1,987	2,248
Dearborn	980	1,051	1,355	2,117	2,025
Dearborn Heights	323	344	418	711	2,104
Detroit	19,780	20,063	20,542	40,457	2,022
East Lansing[b]	323	342	400	610	1,787
Farmington Hills	239	253	384	480	1,894
Flint	3,677	3,961	4,298	7,450	1,891

TABLE X-20. GOVERNMENT EMPLOYMENT AND PAYROLLS IN MICHIGAN, BY TYPE OF GOVERNMENT, FOR COUNTIES HAVING 100,000 POPULATION OR MORE AND FOR CITIES HAVING 50,000 POPULATION OR MORE: OCTOBER 1982 (cont.)

Type of government	Number of employees: Full-time only	Number of employees: Full-time equivalent	Number of employees: Total	October payroll ($000)	Average earnings[a]
Cities (cont.)					
Grand Rapids	1,784	1,842	2,355	3,107	1,695
Kalamazoo	958	986	1,064	1,736	1,762
Lansing	2,334	2,362	2,585	4,496	1,906
Livonia	605	647	853	1,330	2,072
Pontiac	2,618	2,636	2,710	3,946	1,496
Roseville	275	284	312	615	2,178
Royal Oak	367	390	518	811	2,091
Saginaw	749	771	954	1,500	1,944
St. Clair Shores[c]	439	453	505	749	1,688
Southfield	597	645	844	1,428	2,224
Sterling Heights	615	634	737	1,278	2,027
Taylor[c]	392	398	429	578	1,453
Troy	362	386	499	830	2,164
Warren	979	999	1,183	2,175	2,174
Westland[c]	376	388	449	701	1,813
Wyoming	361	374	518	672	1,803

SOURCE: Bureau of the Census, Public Employment in 1982, Series GE 82, no. 1 (Washington, D.C.: 1983), Table 9; and Bureau of the Census, County Government Employment in 1982, Series GE 82, no. 4 (Washington, D.C.: 1983), Table 4; and Bureau of the Census, City Employment in 1982, Series GE 82, no. 2 (Washington, D.C.: 1983), Table 4.

NOTE: Figures include faculty and staff of state and local institutions of higher education. Average earnings by counties and cities are for employees other than teachers.

a. Full-time employees only.
b. Data are for October 1981.
c. Data are for October 1980.

TABLE X-21. FULL-TIME EQUIVALENT EMPLOYMENT OF STATE AND LOCAL GOVERNMENTS PER 10,000 POPULATION IN MICHIGAN AND THE UNITED STATES, BY FUNCTION: OCTOBER 1976, 1981, AND 1982

	Michigan			United States		
	1976	1981	1982	1976	1981	1982
Local schools						
Instructional staff	127.1	115.2	110.4	126.9	122.3	118.8
Other	72.5	57.7	55.7	53.0	54.2	52.6
TOTAL	199.6	172.8	166.1	179.9	176.5	171.4
Higher education						
Instructional staff	19.8	19.9	19.3	19.0	18.8	18.4
Other	36.9	42.5	40.5	30.2	31.9	31.5
TOTAL	56.7	62.4	59.8	49.2	50.7	49.9
Other education	2.7	2.6	2.4	4.0	4.0	3.9
TOTAL EDUCATION	258.9	237.8	228.3	233.1	231.2	225.2
Welfare	16.4	18.7	17.1	15.9	16.1	16.1
Hospitals	40.6	39.2	39.0	44.7	46.4	46.1
Health	7.1	8.2	8.3	8.8	10.0	9.9
Highways	19.0	15.4	15.0	25.7	22.2	21.9
Police	23.3	23.0	23.1	25.4	26.0	25.9
Fire protection	8.3	7.9	7.7	10.0	10.0	9.9
Sewerage	3.1	4.3	4.3	3.8	4.2	4.3
Other sanitation	3.3	2.8	2.8	5.7	5.0	4.7
Parks and recreation	5.1	5.5	5.1	6.9	6.5	7.3
Natural resources	5.6	4.2	5.2	8.2	8.2	7.2
Correction	7.8	10.1	10.1	9.6	11.3	12.0
Local libraries	2.2	2.2	1.9	3.0	2.9	2.8
Social security administration	5.4	5.0	4.5	4.8	4.5	4.1
Financial administration	10.2	10.9	9.3	12.1	12.5	12.1
General control	17.0	18.4	18.9	15.9	17.7	17.9
Water supply	4.7	4.6	4.8	5.5	5.3	5.4
Other local utilities	5.2	2.2	2.1	8.8	3.4	3.5
State liquor stores	.6	.8	.7	.7	.6	.6
Other	17.5	20.8	22.4	26.8	32.0	30.9
GRAND TOTAL INCLUDING EDUCATION	461.4	442.2	430.9	475.5	476.1	467.7

SOURCE: Bureau of the Census, Public Employment in 1982 (Washington, D.C.: 1983), GE-82, no. 1, Table 12; and similar documents for 1976 and 1981.

TABLE X-22. EXPENDITURES AND PERSONNEL, MILITARY AND CIVILIAN, OF THE DEPARTMENT OF DEFENSE BY DEFENSE DIVISION AND CATEGORY IN MICHIGAN, FISCAL YEAR 1982

	Total	Army	Navy and Marine Corps	Air Force	Other defense activities
I. Expenditures - Total ($000)	$2,242,123	$1,263,322	$312,369	$442,316	$224,116
A. Payroll - Total	652,109	298,818	63,756	249,318	40,217
Active duty military pay	152,906	27,824	14,479	110,603	--
Civilian pay	288,625	183,891	2,024	62,493	40,217
Reserve and National Guard pay	55,176	28,203	12,208	15,305	--
Retired military pay	154,862	58,900	35,045	60,917	--
B. Prime contracts over $10,000 - Total	1,590,014	964,504	248,613	192,998	183,899
Supply contracts	1,149,936	708,498	129,850	138,796	172,792
R & D contracts	194,796	78,318	109,643	5,859	976
Service contracts	213,363	146,306	8,805	48,121	10,131
Construction contracts	14,052	13,515	315	222	--
Civil function contracts	17,867	17,867	--	--	--
II. Personnel - Total	21,265	8,307	1,014	10,212	1,732
Active duty military	9,266	1,011	922	7,333	--
Civilian	11,999	7,296	92	2,879	1,732

SOURCE: U.S. Department of Defense, Atlas/State Data Abstract for the United States, Fiscal Year 1982, (Washington, D.C.: 1983).

TABLE X-23. EXPENDITURES AND PERSONNEL, MILITARY AND CIVILIAN, OF THE DEPARTMENT OF DEFENSE BY INSTALLATION IN MICHIGAN, FISCAL YEAR 1982

	Expenditures					
Installation	Total ($000)	Payroll outlays ($000)	Prime contracts ($000)	Total	Active duty military	Civilian
Warren	$353,337	$110,031	$243,306	4,798	7	4,791
Muskegon	205,283	3,804	201,497	4,269	3,831	438
Walled Lake	173,533	1,349	172,184	3,430	3,026	404
Detroit	137,588	47,828	89,760	2,203	561	1,642
Center Line	113,146	--	113,146	1,772	37	1,735
Sterling Heights	100,373	39,357	61,016	1,509	816	693
Grand Rapids	99,267	6,997	92,270	911	6	905
K.I. Sawyer AFB	79,181	67,588	11,593	368	147	221
Flint	74,910	5,940	58,970	189	--	189
Wurtsmith	68,762	54,190	14,572	148	42	106

SOURCE: U.S. Department of Defense, Atlas/State Data Abstract for the United States, Fiscal Year 1982, (Washington, D.C.: 1983).

TABLE X-24. TOP FIVE CONTRACTORS (AWARDS OVER $10,000) FOR DEPARTMENT OF DEFENSE IN MICHIGAN AND MAJOR LOCATIONS OF PERFORMANCE, FISCAL YEAR 1982

Contractors (Location)	Total amount ($000)	Major areas of work
General Dynamics Corp., Warren	$372,365	Armed vehicle production; R&D
Teledyne Industries, Inc., Muskegon	194,793	Armed vehicle components
Williams International Corp. Walled Lake	171,622	Missle components; R&D
General Motors Corp., Flint	143,166	Armed vehicle and personnel carrier comp., trucks; diesel engines
Lear Siegler, Inc., Grand Rapids	62,579	Aircraft components and system engineering
TOTAL (59.4% of total awards over $10,000)	944,535	

SOURCE: U.S. Department of Defense, Atlas/State Data Abstract for the United States, Fiscal Year, 1982, (Washington, D.C.: 1983).

TABLE X-25. SUMMARY DISTRIBUTION OF ALLOCABLE FEDERAL FUNDS TO MICHIGAN, FISCAL YEARS: 1982-1983

(In millions of dollars)

	Michigan			United States		
	1981	1982	1983	1981	1982	1983
Grants to state and local governments	4,108	3,634	3,614	94,806	88,221	92,712
Salaries and wages	795	889	1,626	74,169	78,043	102,601
Direct payment to individuals[a]	10,584	11,546	12,531	259,653	286,080	325,882
Procurement[b]	2,011	1,840	1,941	128,188	145,816	158,929
Other	116	106	266	5,402	5,415	16,656
TOTAL[c]	17,614	18,016	19,978	562,219	603,576	696,780

SOURCE: Bureau of the Census, Federal Expenditures by State for Fiscal Year 1981, also 1982 and 1983, (Washington, D.C.: annually), Table 1.

a. Includes Social Security, federal retirement, and other social insurance programs.

b. Excludes procurement contracts under $25,000 for the Defense Department and under $10,000 for nondefense agencies.

c. Excludes interest on the federal debt, foreign aid, and a host of other programs.

TABLE X-26. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS FEDERAL GOVERNMENT AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

County	Percentage 1972	Percentage 1982	County	Percentage 1972	Percentage 1982
Iosco	48.89	45.76	Shiawassee	1.33	1.54
Marquette	23.25	19.07	Mason	1.10	1.53
Chippewa	41.32	11.26	Newaygo	1.20	1.49
Calhoun	6.18	8.99	Mecosta	1.46	1.48
Dickinson	8.80	8.95	Manistee	2.00	1.47
Macomb	5.22	5.48	Osceola	1.38	1.45
Leelanau	5.95	4.66	St. Clair	1.56	1.45
Houghton	5.76	4.42	Schoolcraft	2.25	1.45
Cheboygan	2.89	4.37	Menominee	1.55	1.38
Gogebic	3.52	4.31	Ionia	1.24	1.37
Alcona	4.51	3.72	Barry	1.33	1.37
Mackinac	2.71	3.62	Van Buren	1.33	1.36
Charlevoix	3.23	3.45	Kalamazoo	1.57	1.33
Lake	2.86	3.25	Tuscola	1.32	1.32
Otsego	2.33	2.62	Livingston	1.39	1.31
Delta	2.23	2.60	Isabella	1.55	1.30
Benzie	2.39	2.55	Allegan	1.32	1.30
Oscoda	(D)	2.53	Alpena	2.28	1.29
Wexford	2.86	2.50	Cass	1.25	1.25
Alger	2.07	2.50	Hillsdale	1.27	1.25
Clinton	1.76	2.48	Lapeer	1.29	1.22
Wayne	1.93	2.31	Bay	1.23	1.20
Grand Traverse	2.09	2.22	Montcalm	1.24	1.19
Arenac	2.28	2.19	Jackson	1.24	1.18
Montmorency	(D)	2.18	Kent	1.32	1.16
Oceana	2.80	2.15	Muskegon	1.11	1.14
Ingham	2.14	2.13	Gratiot	1.11	1.14
Washtenaw	1.99	2.07	Berrien	0.94	1.10
Gladwin	1.88	2.06	Lenawee	0.85	1.09
Missaukee	(D)	2.06	Monroe	1.53	1.06
Huron	2.23	2.02	Ontonagon	1.01	1.04
Saginaw	1.53	1.86	Kalkaska	(D)	0.98
Clare	1.94	1.84	Ottawa	0.95	0.96
Antrim	2.14	1.78	Branch	0.97	0.95
Baraga	(D)	1.76	Genesee	0.94	0.92
Emmet	2.19	1.75	St. Joseph	0.83	0.85
Iron	3.36	1.68	Oakland	1.31	0.80
Roscommon	1.71	1.62	Midland	0.60	0.50
Crawford	7.33	1.58	Keweenaw	(D)	(D)
Ogemaw	1.71	1.56	Luce	(D)	(D)
Eaton	1.56	1.55			
Sanilac	1.33	1.55	Michigan	2.29	2.25
Presque Isle	4.74	1.54	United States	6.56	5.63

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NOTE: Earnings of federal employees include earnings of military and civilian personnel.

(D) Witheld to avoid disclosing data for individual companies.

TABLE X-27. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN FEDERAL GOVERNMENT: 1981-1982

	Percentage change			Percentage change	
County	1972-1982	1981-1982	County	1972-1982	1981-1982
Iosco	72	16	Kalkaska	(D)	5
Ingham	138	15	Isabella	126	5
Roscommon	122	15	Midland	112	5
Baraga	(D)	12	Mackinac	187	5
Montmorency	(D)	11	Ionia	131	4
Tuscola	113	11	Jackson	79	4
Marquette	83	11	Branch	104	4
Menominee	98	11	Clinton	212	4
Gratiot	96	11	Ottawa	160	4
Alpena	5	10	Wayne	97	4
Arenac	112	10	Cheboygan	229	4
Gogebic	118	10	Lenawee	110	4
Eaton	112	10	Benzie	124	3
Monroe	63	10	Saginaw	134	3
Ontonagon	43	9	Charlevoix	145	3
St. Joseph	115	9	Mason	121	3
Huron	85	9	Alcona	63	3
Manistee	49	9	Presque Isle	-33	3
Barry	104	9	Washtenaw	172	3
Newaygo	152	8	Bay	100	3
Delta	170	8	Antrim	68	2
Chippewa	-62	8	Genesee	100	2
Emmet	75	8	Kent	113	2
Leelanau	46	7	Montcalm	119	2
Alger	142	7	Grand Traverse	227	1
Macomb	106	7	Muskegon	108	1
Oakland	55	7	Gladwin	138	1
Sanilac	99	7	Mecosta	129	0
Wexford	134	7	Iron	7	0
Hillsdale	97	7	Kalamazoo	110	0
Clare	110	6	St. Clair	112	0
Livingston	156	6	Schoolcraft	52	0
Ogemaw	112	6	Berrien	98	0
Lapeer	107	6	Oceana	72	-1
Osceola	125	6	Houghton	74	-1
Van Buren	108	6	Shiawassee	108	-1
Missaukee	(D)	6	Crawford	-43	-72
Allegan	126	6	Keweenaw	(D)	(D)
Lake	62	5	Luce	(D)	(D)
Calhoun	177	5	Oscoda	(D)	(D)
Dickinson	136	5			
Otsego	219	5	Michigan	97	6
Cass	95	5	United States	109	8

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE X-28. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS STATE OR LOCAL GOVERNMENT AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

	Percentage			Percentage	
County	1972	1982	County	1972	1982
Luce	63.93	74.62	Menominee	12.04	16.32
Mecosta	36.83	44.69	Missaukee	17.14	16.30
Keweenaw	25.87	37.25	Clinton	18.74	15.89
Roscommon	27.30	36.65	Manistee	13.06	15.32
Lapeer	25.73	35.24	Mason	9.29	15.13
Lake	17.19	32.23	Wexford	13.80	15.13
Houghton	27.36	31.35	Osceola	17.82	15.07
Baraga	20.88	31.23	Barry	12.62	15.05
Isabella	32.25	30.89	Charlevoix	13.34	14.89
Oscoda	26.61	30.35	Cass	12.17	14.29
Iron	28.03	28.59	Lenawee	8.87	14.10
Chippewa	17.02	27.86	Kalamazoo	13.98	13.78
Branch	22.64	27.01	Cheboygan	11.59	13.56
Gogebic	20.34	26.88	Hillsdale	11.41	13.50
Ingham	22.70	26.45	Dickinson	10.93	13.44
Tuscola	20.03	25.54	St. Clair	12.22	13.33
Washtenaw	23.81	24.63	Ogemaw	17.42	13.11
Schoolcraft	23.50	24.50	Delta	13.58	13.02
Montmorency	18.13	24.08	Sanilac	10.39	12.70
Mackinac	21.64	23.95	Jackson	11.07	12.58
Oceana	17.97	22.70	Monroe	11.89	12.43
Ionia	18.90	22.53	Emmet	11.34	12.33
Marquette	17.81	21.24	Kalkaska	24.04	12.15
Clare	17.58	20.99	Iosco	8.63	12.05
Alpena	16.65	20.96	St. Joseph	10.05	11.68
Livingston	20.22	20.67	Montcalm	11.97	11.63
Alcona	24.47	19.70	Allegan	12.27	11.35
Shiawassee	11.51	19.28	Bay	11.13	10.87
Huron	14.89	19.15	Gratiot	9.59	10.33
Alger	19.75	19.12	Muskegon	9.50	10.29
Antrim	13.79	18.95	Wayne	9.15	10.15
Eaton	16.90	18.13	Berrien	7.95	9.97
Crawford	19.51	17.93	Macomb	8.85	9.70
Gladwin	17.38	17.87	Ottawa	9.22	9.54
Otsego	17.35	17.47	Genesee	8.39	9.03
Leelanau	13.06	16.93	Saginaw	7.44	8.74
Presque Isle	14.94	16.90	Oakland	9.39	8.11
Benzie	15.99	16.70	Kent	7.14	7.59
Grand Traverse	17.81	16.66	Calhoun	7.91	7.57
Van Buren	14.27	16.66	Midland	6.81	6.15
Arenac	19.11	16.60			
Newaygo	12.95	16.43	Michigan	10.93	12.17
Ontonagon	9.86	16.41	United States	11.27	11.31

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

NOTE: Earnings of state and local employees include earnings of military (national guard) and civilian personnel. The latter include faculty and staff of state and local institutions of higher education, public schools, those who staff police and fire departments and other state and local units.

TABLE X-29. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN STATE AND LOCAL GOVERNMENT: 1981-1982

	Percentage change			Percentage change	
County	1972-1982	1981-1982	County	1972-1982	1981-1982
Montmorency	104	23	Midland	129	6
Otsego	185	20	Muskegon	118	6
Kalkaska	205	18	Alpena	133	6
Charlevoix	156	17	Luce	179	6
Schoolcraft	147	16	Huron	162	5
Cass	128	15	Leelanau	142	5
Lenawee	161	12	Chippewa	128	5
Lake	167	12	Kalamazoo	144	5
Kent	157	11	Tuscola	171	5
Hillsdale	136	11	Mason	160	5
Eaton	128	10	Keweenaw	30	4
Newaygo	158	10	Arenac	92	4
Marquette	166	9	Ionia	148	4
Gogebic	135	9	Oakland	121	4
Menominee	202	9	Genesee	118	4
Iosco	157	9	Oceana	183	4
St. Joseph	142	9	Ontonagon	132	4
Washtenaw	171	8	Iron	119	4
Montcalm	121	8	Macomb	116	3
Wexford	193	8	Wayne	82	3
Emmet	137	8	Alcona	59	3
Grand Traverse	189	8	Crawford	143	3
Ottawa	166	8	Presque Isle	133	3
Antrim	177	8	Shiawassee	202	2
Monroe	146	8	Gladwin	123	2
Livingston	178	8	Baraga	131	1
Clinton	87	7	Jackson	114	1
Missaukee	113	7	Clare	163	0
Roscommon	216	7	Delta	122	0
Mecosta	173	7	Oscoda	107	0
Van Buren	138	7	Berrien	111	0
Saginaw	126	7	Allegan	112	0
Benzie	119	7	Sanilac	109	-1
Branch	149	7	Calhoun	82	-1
Barry	137	7	Alger	94	-2
St. Clair	149	6	Osceola	80	-2
Cheboygan	155	6	Gratiot	106	-4
Lapeer	201	6	Ogemaw	74	-4
Dickinson	186	6	Mackinac	137	-5
Isabella	159	6	Bay	102	-9
Manistee	138	6			
Ingham	178	6	Michigan	124	5
Houghton	160	6	United States	145	8

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

XI. OUTDOOR ENVIRONMENT

Michigan's land area is 56,817 square miles, its water area 1,399 square miles. The state's highest elevation, Mount Curwood, in the Porcupine Mountains, is 1,980 feet above sea level. Michigan's lowest elevation of 572 feet is on Lake Erie.

The records of the General Services Administration indicate that the federal government owns or leases around 3,400,000 acres of land in the state. The Michigan Department of Natural Resources and the State Military Board own about 4,400,000 acres.

Land areas of Michigan counties are given in the U.S. Census of Population: 1970. Statistics on gross county areas are available from the Michigan Department of Natural Resources.

Data pertaining to climate at Michigan weather stations are available in Climate of Michigan, by Stations, a publication of the Michigan Weather Service. Separate reports, Local Climatological Data, are available for the stations at Alpena, Detroit, Escanaba, Flint, Grand Rapids, Lansing, Marquette, Muskegon, and Sault Ste. Marie. The Michigan Weather Service also publishes specific reports, such as those on temperature extremes and snowfall.

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TABLE XI-1. MICHIGAN CLIMATE, BY WEATHER STATIONS: 1982

	Temperature (°F)				Precipitation (inches)	
	January		July			
Station	Average	Departure from normal[a]	Average	Departure from normal[a]	Annual total	Departure from normal[a]
West Upper Division						
Alberta Ford Forestry Ctr	5.2		67.3		39.1M	--
Baraga	7.9		65.8		29.6	--
Beechwood 7 WNW	2.8		67.2		41.9	--
Bergland Dam	1.4		65.5		45.1	6.5
Big Bay 1 S	9.4M		66.5		34.8M	--
Champion Van Riper Pk	2.8		65.2		38.7	4.6
Copper Harbor	11.3		61.2		47.4	--
Crystal Falls 6 NE	.5		65.4		33.2	3.3
Herman	3.1		65.3		54.8M	--
Houghton FAA AP	M	1.3	65.0	.9	--	--
Iron Mntn Water Works	5.7	-8.7	68.4	1.5	34.2M	--
Ironwood	-.2	-12.8	65.9	-1.6	46.1M	--
Ishpeming	5.9	-8.8	67.0	1.2	30.9	-.1
Kenton Forest	2.7	-10.2	66.7	1.2	33.1	2.3
Marquette	10.9	-7.5	65.1	-1.2	33.6	2.7
Marquette WSO CI	4.7	-8.0	66.0	1.8	36.6M	--
Mott Island Isle Royal	M		58.5		--	--
Ontonagon 6 SE	7.1		67.6		38.2	--
Stambaugh 1 S	2.2	-11.2	66.6	1.0	37.1	6.4
Stephenson 8 WNW	6.7		68.4		38.3	6.3
Watersmeet	-1.1	-13.3	63.8	-1.3	39.5	5.4
Division	4.7	-9.7	65.6	.3	38.3	6.2
East Upper Division						
Chatham Experimental Farm	8.1	-8.7	66.2	1.1	42.9	9.2
Cornell 4 WSW	6.2M		67.4		39.9	--
Detour Village	8.9		66.9		31.4	2.4
Dunbar Forest Exp Station	3.7		64.9		32.8	--
Escanaba	8.8	-8.6	66.6	-.1	33.0	5.0
Fayette 3 SW 2 E	11.9	-6.9	66.7	1.0	37.5M	--
Grand Marais	11.5	-6.7	64.2	1.5	32.6M	--
Manistique	8.9M	-9.3	63.8	-1.3	--	--
Munising	9.1	-9.1	64.8	-.1	46.1	12.3
Newberry State Hosp	8.5	-7.8	65.2M	.4	34.9M	--
Rudyard 4 N	6.7		65.4		--	--
St Ignace-Mackinac Brdg	11.6		66.2		27.0M	--

TABLE XI-1. MICHIGAN CLIMATE, BY WEATHER STATIONS: 1982 (cont.)

	Temperature (°F)				Precipitation (inches)	
	January		July			
Station	Average	Departure from normal[a]	Average	Departure from normal[a]	Annual total	Departure from normal[a]
East Upper Division (cont.)						
Sault Ste. Marie WSO	4.7	-9.5	62.7	-1.1	37.5M	--
Seney National WLR	9.8	-6.9	67.9	1.9	M	--
Tahquamenon Falls Pk	7.2M		64.2		41.3M	--
Trout Lake	7.0		63.9		--	--
Whitefish Point	M		60.6		--	--
Division	8.3	-8.6	65.2	.5	36.1	4.2
Northwest Lower Division						
Boyne Falls	13.0		69.3		53.9M	--
Cadillac	11.7	-6.2	67.1	1.0	32.7M	--
Cross Village	13.5		68.8		30.4	--
East Jordon	13.0	-7.9	68.9	1.1	35.7	4.3
Fife Lake 4 SW	12.4		69.2		--	--
Frankfort 2 NE	15.2		67.7		35.3M	--
Houghton Lake 6 WSW	10.9	-8.4	66.3	-1.4	26.8	-1.8
Lake City Exp Farm	10.8	-7.5	66.9	-.3	31.3	2.5
Manistee	M		M		41.7	10.7
Maple City	15.3		70.5		36.9M	--
Old Mission 3 SSW	16.2		68.2		28.0	--
Pellston FAA AP	9.9	-6.6	68.8	3.3	37.2M	--
Petoskey	15.1		67.9		31.1	--
St. James Beaver Island	12.3		65.7		32.9M	--
Traverse City FAA AP	13.0	-7.8	70.4	1.7	28.3	-1.6
Division	13.0	-7.2	68.3	1.0	32.8	1.8
Northeast Lower Division						
Alpena WSO AP	11.2	-6.6	67.9	2.4	26.5M	--
Alpena WW Trtmt Plant	13.9	-6.6	67.8	.8	25.6	-1.5
Atlanta 2 SW	6.8	-11.8	68.7	1.5	--	--
Cheboygan	8.7	-10.9	M		--	--
East Tawas	13.8	-7.4	67.3	-.9	31.9	2.6
Gaylord 2 W	11.1		68.5		36.1	3.4

TABLE XI-1. MICHIGAN CLIMATE, BY WEATHER STATIONS: 1982 (cont.)

Station	Temperature (°F)				Precipitation (inches)	
	January		July			
	Average	Departure from normal[a]	Average	Departure from normal[a]	Annual total	Departure from normal[a]
Northeast Lower Division (cont.)						
Grayling	8.9	-9.2	67.2	-.2	39.4M	--
Hale Loud Dam	13.5	-5.0	68.6	1.5	25.5	-2.9
Harrisville 6 N	14.5		67.5		28.7M	--
Houghton Lake WSO AP	11.4	-6.0	68.6	2.4	31.8M	--
Lupton 1 S	9.5		67.2		30.2M	--
Mio Hydro Plant	11.2	-6.7	68.2	1.4	25.5	-.9
Onaway State Park	12.7	-6.1	70.5	2.5	31.5	1.9
Rogers City 5 SE	12.1		67.1		34.8M	--
Vanderbilt 11 ENE	8.3	-9.0	66.5	.6	33.4M	--
West Branch	11.6	-6.8	68.8	1.7	31.0	2.0
Division	11.2	-7.7	68.0	.9	30.7	1.5
West Central Lower Division						
Baldwin	12.7	-8.1	68.8	-.2	44.3	11.3
Hart	15.0	-8.3	70.8	1.0	42.6M	--
Hesperia 4 WNW	14.0		69.5		44.0M	--
Ludington 4 SE	15.5	-7.8	70.2	1.5	36.7M	--
Montague 4 NW	15.7M		69.3		35.1	--
Muskegon WSO AP	16.1	-7.9	71.6	1.6	37.1M	--
Newaygo 2	--		--		--	
Scotville 1 NE	--		--		--	
Division	14.8	-7.7	70.0	.8	39.2	6.9
Central Lower Division						
Alma	13.5	-8.8	69.8	-1.8	29.7	.5
Big Rapids Water Works	13.4	-7.5	70.5	1.4	41.2	8.6
Evart	11.2		68.6		33.0	--
Gladwin	12.9	-6.8	69.5	.8	--	--
Greenville 2 NNE	14.9	-7.6	71.2	-.1	34.9	3.2
Midland	15.8M	-7.3	72.0	.4	26.7	-2.8
Mt. Pleasant Univ	14.5	-7.1	70.4	-.5	34.9	5.0
Division	13.7	-7.8	70.3	.1	33.4	2.6
East Central Lower Division						
Bad Axe	15.3	-6.2	69.0	-.4	--	--
Caro State Hospital	16.2	-5.8	70.8	.5	28.8	.6
Cass City 1 SSW	--		--		33.7	--
Essexville	16.4	-6.7	71.7	-.3	30.2M	--
Harbor Beach 1 SSE	17.0M	-4.9	66.5	-1.9	33.6	.3

TABLE XI-1. MICHIGAN CLIMATE, BY WEATHER STATIONS: 1982 (cont.)

Station	Temperature (°F)				Precipitation (inches)	
	January		July			
	Average	Departure from normal[a]	Average	Departure from normal[a]	Annual total	Departure from normal[a]
East Central Lower Division (cont.)						
Millington 3 SW					30.6	2.2
Saginaw Consumers Pwr Co.	17.3		72.9		30.6	--
Saginaw 3					28.6	--
Saginaw FAA AP	14.3	-7.1	70.7	.1	26.5M	--
Saint Charles	15.8		68.6		31.7	2.8
Sandusky	15.6	-6.8	69.7	-.6	29.2	.2
Sebewaing Mich. Sugar Co.	--		--		--	--
Standish 1 N	13.1	-7.3	68.0	-1.1	33.2	5.4
Division	15.7	-6.2	69.8	-.5	30.6	1.4
Southwest Lower Division						
Allegan	15.5	-9.3	71.0	-1.0	45.4	12.3
Benton Harbor AP	M		73.3	1.9	--	--
Bloomingdale	16.2	-8.6	70.9	-.9	40.6	3.9
Dowagiac 1 W	16.1		72.4		40.2	--
Eau Claire 4 NE	16.2	-8.5	73.9	.9	38.5	2.9
Grand Haven Fire Dept.	18.6	-6.9	73.8	3.6	31.5M	--
Grand Rapids WSO AP	17.2	-6.0	73.1	1.6	37.0M	--
Gull Lk Bio Station	16.6	-6.9	72.6	.6	38.1M	--
Holland	17.8	-7.6	73.1	1.7	38.5	3.5
Kalamazoo State Hosp.	17.1	-7.7	73.4	.5	--	--
Kent City 2 SW					40.2	8.2
Lowell					37.7	5.0
Lowell 2 SE					36.8	--
Niles					43.7	--
South Haven	18.9	-7.5	71.8	1.1	M	--
Division	17.0	-7.9	72.7	.9	38.1	3.6
South Central Lower Division						
Albion	--		--		34.3	.5
Battle Creek	16.3	-7.0	72.2	.4	37.7M	--
Burlington 3 E	--		--	--	--	--
Charlotte	15.2	-7.9	70.0	-1.0	30.1	-2.3
Coldwater State Schl.	14.4	-9.5	71.2	.1	35.4	1.6
Dimondale	--		--		31.5	--
East Lansing 4 S	14.5		69.9		33.0	--
Eaton Rapids	--		--		33.6M	--
Grand Ledge 1 NW	--		--		33.5	3.1
Hastings	15.5	-8.1	71.0	-.8	31.9	1.0
Hastings 3 SE	--		--		34.3	--
Hillsdale	14.5	-9.1	72.2	1.4	40.8	4.1

TABLE XI-1. MICHIGAN CLIMATE, BY WEATHER STATIONS: 1982 (cont.)

	Temperature (°F)				Precipitation (inches)	
	January		July			
Station	Average	Departure from normal[a]	Average	Departure from normal[a]	Annual total	Departure from normal[a]
South Central Lower Division (cont.)						
Jackson FAA AP	15.8	-7.2	73.0	1.3	29.1M	--
Lansing WSO AP	15.3	-7.3	70.8	-.1	28.4M	--
Munith 5 SW	--		--		31.6	--
Nottawa 3 SE	--		--		34.7	--
Owosso Wastew. Plt.	15.4M	-7.6	71.6	.9	26.4	-3.2
St. Johns	16.4M	-6.2	72.3	1.0	26.7M	--
Three Rivers	15.9	-8.6	73.1	1.1	37.8	3.6
White Pigeon 3 ENE	--		--		36.0	--
Williamston	--		--		31.3	--
Division	15.4	-7.9	71.4	.1	33.2	1.2
Southeast Lower Division						
Adrian 2 NNE	15.8M	-8.5	71.6	-.8	36.5	3.6
Almont	--		--		26.5	--
Ann Arbor, Univ of Mich	16.3	-8.6	72.3	-.4	36.7	6.1
Chelsea 1 NE	--		--		28.5	--
Dearborn	17.6		72.9		34.2M	--
Detroit City AP	19.9	-5.6	76.2	2.9	--	--
Detroit Metro WSO AP	17.1	-7.5	72.4	.1	34.2	2.6
Flint WSO AP	16.4	-5.9	71.3	1.6	28.5M	--
Flint 7 W	--		--		30.0	--
Grosse Pointe Farms	18.7		73.6		30.2	--
Howell WW Plt.	--		--		30.3	.4
Hudson	--		--		--	
Lapeer	15.2	-7.4	69.0	-1.5	28.6	.1
Milford GM Proving Grnd.	16.6	-5.5	71.1M	.5	--	--
Monroe	17.8	-7.9	74.9	1.5	--	--
Morenci	--		--		39.2	--
Mt. Clemens AF Base	18.4	-5.7	70.7	-1.2	34.3	6.6
Pontiac State Hosp.	16.2	-7.3	72.4	.5	31.0M	--
Port Huron	16.2	-8.3	72.2	.4	28.7M	--
Washington 2 NNW	15.3		71.7		25.1	--
Willis 5 SSW	14.8	-8.6	71.0	.1	--	--
Yale 1 NNE	--		--		25.6	-4.9
Ypsilanti, EMU	16.9	-7.8	74.2	1.4	32.8	2.1
Division	16.8	7.3	72.3	.3	33.1	2.0

SOURCE: National Oceanic and Atmospheric Administration, Climatological Data-Michigan Annual Summary, 1982, vol. 97, no. 13 (Asheville, N.C.: 1983).

a. Normals for all stations are climatological normals based on the period 1941-1970.

M: One or more days record missing; if average value is entered, less than 10 days record is missing.

E: Amount is wholly or partially estimated.

AP: Airport.

WSO: Weather station office.

Station Names: Figures and letters following the station name, such as 12 SW, indicate distance in miles and direction from post office.

TABLE XI-2. STATE PARK USE AND TURNAWAY IN MICHIGAN: 1970-1983

Year	Number of day users[a]	Number of camper days[a]	Total attendance[a]	Number of camp permits	No. of vehicles turned away	
					Camping	Day use
1970	14,384	6,108	20,492	464,541	86,032	42,206
1971	15,419	6,495	21,914	491,807	84,258	52,465
1972	12,941	6,251	19,191	485,616	59,730	27,719
1973	13,606	6,248	19,849	496,812	57,445	25,378
1974	13,358	6,128	19,486	471,313	71,711	31,973
1975	14,768	5,598	20,366	462,123	70,962	46,708
1976	16,132	5,882	22,014	482,787	77,218	35,085
1977	n.a.	n.a.	22,344	480,133	79,107	40,154
1978	n.a.	n.a.	23,656	475,551	66,613	65,708
1979	n.a.	n.a.	21,426	422,371	51,128	38,227
1980	15,598	5,187	20,784	403,450	55,333	47,527
1981	20,812	5,257	20,812	398,404	49,205	29,219
1982	15,342	5,334	20,677	405,402	50,650	26,890
1983	17,729	5,300	23,029	403,562	51,944	40,811

SOURCE: Michigan Department of Natural Resources, special release.

a. Figures in thousands.
b. Number of vehicles.
n.a.: not available.

TABLE XI-3. STATE FOREST CAMPGROUND USE: 1970-1983

Year	Number of camps	Number of campers	Camper days	Number of day users[a]
1970	68,623	268,164	995,974	329,934
1971	73,714	284,779	1,083,684	352,796
1972	70,899	268,099	996,409	356,170
1973	79,114	292,746	1,040,361	391,782
1974	77,716	288,243	1,070,023	391,782
1975	82,359	283,232	1,059,659	396,741
1976	88,024	304,784	1,122,527	529,000
1977	90,227	311,539	1,147,905	n.a.
1978	85,806	299,197	1,067,043	529,246
1979	73,143	248,167	748,090	380,530
1980	71,168	242,025	615,126	282,289
1981	76,606	258,573	537,291	243,411
1982	63,831	210,564	395,474	149,019
1983	59,492	201,179	398,080	156,755

SOURCE: Michigan Department of Natural Resources, special release.

a. estimates.
n.a.: not available.

TABLE XI-4. LOCATION, ACREAGE, NUMBER OF CAMPSITES, AND USAGE OF MICHIGAN STATE PARKS: 1980-1982

Name	Post office location	Acreage	Number of campsites	Attendance 1980	Attendance 1981	Attendance 1982
				Upper Peninsula		
Baraga	Baraga US-41	56	137	33,009	35,695	34,420
Bewabic	Crystal Falls US-2	276	144	52,091	49,681	50,404
Brimley[a]	Brimley M-221	151	270	152,553	160,797	154,242
Detour	St. Ignace M-34	403	22	n.a.	n.a.	--
Fayette	Fayette US-2	712	80	102,731	105,260	98,594
Fort Wilkins	Copper Harbor US-41	199	165	182,186	189,067	179,413
Indian Lake	Manistique M-149	567	301	105,983	100,099	98,522
Lake Gogebic	Marenisco M-64	361	165	55,293	56,059	56,690
McLain	Hancock M-203	418	90	171,223	168,170	163,425
Muskallonge Lake	Newberry M-123	211	179	61,715	64,748	62,912
Palms Book	Manistique M-149	388	(b)	63,803	62,494	58,969
Porcupine Mtns	Ontonagon M-107	58,335	199	328,727	362,557	362,033
Straits	St. Ignace I-75	181	318	216,613	202,448	211,406
Tahquamenon Falls	Paradise M-123	35,870	319	520,862	537,437	496,726
Twin Lakes	Winona M-26	175	62	27,328	28,112	27,314
Van Riper	Champion US-41	1,044	226	79,747	81,036	83,453
J.W. Wells	Cedar River M-35	974	155	85,101	86,242	88,932
Subtotal				2,238,965	2,289,902	2,227,455
				Northern Lower Peninsula		
Aloha	Cheboygan M-212	91	287	202,894	199,842	195,426
Bay City	Bay City M-247	196	255	268,836	262,872	256,123
Burt Lake	Indian River I-75	405	375	174,793	177,645	175,155
Cheboygan	Cheboygan US-23	932	78	47,352	48,925	49,003

TABLE XI-4. LOCATION, ACREAGE, NUMBER OF CAMPSITES, AND USAGE OF MICHIGAN STATE PARKS: 1980-1982 (cont.)

Name	Post office location	Acreage	Number of campsites	Attendance 1980	1981	1982
Northern Lower Peninsula (cont.)						
Clear Lake	Atlanta M-33	290	200	65,487	61,715	61,959
Fisherman's Island	n.a.	2,762	90	36,064	63,037	71,532
Gladwin	Gladwin M-18	381	45	49,555	43,587	39,890
Harrisville	Harrisville US-23	94	229	112,782	110,576	117,255
Hartwick Pines	Grayling M-93	9,295	60	183,036	198,370	190,331
Hoeft	Rogers City US-23	301	144	50,578	49,295	48,008
Interlochen	Interlochen M-137	187	550	305,343	295,190	296,489
Leelanau[a]	Glen Arbor Co. Rd. 201	1,307	50	112,461	70,300	86,087
Ludington	Ludington M-116	4,514	398	769,017	745,724	762,607
Mears	Pentwater US-31	50	179	350,636	318,455	320,578
Mitchell	Cadillac M-115	32	270	194,401	216,928	246,984
Newaygo	Newaygo M-37	257	100	31,234	31,291	20,486
North Higgins Lake	Roscommon M-18, M-76	429	217	205,028	217,063	225,182
Onaway	Onaway M-211	158	101	69,069	50,173	46,402
Orchard Beach	Manistee M-110	201	175	85,080	86,951	95,419
Otsego Lake	Gaylord I-75	62	203	219,781	225,524	205,628
Petoskey	Petoskey US-31	304	90	235,457	173,420	191,148
Pinconning[a]	Pinconning M-13	201	(c)	42,228	81,891	68,504
Rifle River	Lupton M-33	4,329	159	107,444	110,668	110,820
Silver Lake	Mears US-31	2,765	249	693,955	695,967	619,085
South Higgins Lake	Roscommon US-27	305	500	293,630	340,301	332,019
Tawas Point	E. Tawas US-23	175	200	246,394	253,777	259,939
Traverse City	Traverse City US-31	45	342	224,390	232,953	256,598
White Cloud	White Cloud M-20	89	80	32,825	43,974	24,142
Wilderness	Carp Lake US-31	7,554	210	150,241	150,491	145,589

TABLE XI-4. LOCATION, ACREAGE, NUMBER OF CAMPSITES, AND USAGE OF MICHIGAN STATE PARKS: 1980-1982 (cont.)

Name	Post office location	Acreage	Number of campsites	Attendance 1980	Attendance 1981	Attendance 1982
Northern Lower Peninsula (cont.)						
Wilson	Harrison I-75	36	160	103,973	107,235	101,345
Young	Boyne City M-75	563	294	147,625	141,867	139,368
Subtotal and average increase				5,811,589	5,806,007	5,759,101
Southern Lower Peninsula						
Algonac	Algonac M-29	1,024	281	263,874	273,306	276,982
Bald Mountain	Lake Orion M-24	4,481	25	537,264	471,061	423,039
Brighton	Howell I-96	4,915	222	235,466	244,036	228,665
Dodge #4	Pontiac M-59	136	(b)	476,666	456,705	442,544
Duck Lake[a]	n.a.	707	n.a.	74,250	64,737	74,819
Fort Custer	Augusta I-94	2,962	107	103,620	71,467	146,433
Grand Haven	Grand Haven US-31	48	170	582,214	667,111	696,205
W. J. Hayes	Onsted US-12	654	212	529,510	444,900	553,180
Highland	Milford M-59	5,552	35	327,357	302,931	337,172
Hoffmaster	Muskegon US-31	1,043	333	360,940	414,485	416,455
Holland	Holland US-31	143	356	1,414,760	1,397,579	1,547,513
Holly	Holly I-75	7,472	144	686,852	701,812	697,218
Ionia	Saranac M-66	3,939	30	60,587	69,963	68,192
Island Lake	Brighton I-96	3,439	30	340,280	381,941	354,970
Lake Hudson	n.a.	2,690	n.a.	34,627	24,137	27,351
Lakeport	Port Huron US-23	566	315	275,811	241,339	216,003
Maybury	Northville	944	6	118,861	148,944	164,728
Metamora-Hadley	Metamora M-24	683	211	179,466	188,916	168,257
Muskegon	North Muskegon M-213	1,125	348	387,607	329,627	363,698
Ortonville	Ortonville M-75	4,232	32	132,944	121,532	107,493

TABLE XI-4. LOCATION, ACREAGE, NUMBER OF CAMPSITES, AND USAGE OF MICHIGAN STATE PARKS: 1980-1982 (cont.)

Name	Post office location	Acreage	Number of campsites	Attendance		
				1980	1981	1982
Southern Lower Penisula (cont.)						
Pinckney	Pinckney M-36	10,003	230	380,752	362,996	397,837
Pontiac Lake	Pontiac M-59	3,700	174	405,175	273,776	180,554
Port Crescent	Port Austin M-25	569	181	126,593	117,899	140,763
Proud Lake	Milford I-96	3,727	110	355,279	269,062	287,157
Rochester-Utica	Utica M-59	1,340	(b)	484,397	409,833	355,020
Sanilac[a]	Port Austin US-25	112	19	12,965	12,122	--
Saugatuck	n.a.	909	n.a.	11,714	24,365	39,280
Seven Lakes	Fenton US-23, I-75	1,387	(b)	172,929	104,442	98,874
Sleeper	Caseville M-25	1,003	270	193,758	222,974	215,686
Sleepy Hollow	Lansing US-27	2,678	(c)	185,076	166,407	217,901
Sterling	Monroe I-75	1,001	191	857,514	907,025	727,874
Van Buren	South Haven I-196	326	205	346,734	286,057	272,629
Warren Dunes	Sawyer I-94	1,502	197	1,244,851	1,329,545	1,231,041
Waterloo	Chelsea I-94	18,715	399	636,386	657,698	583,078
Yankee Springs	Middleville M-37	5,004	320	604,340	627,840	631,436
Subtotal				12,733,736	12,715,947	12,690,047
Grand Total				20,784,290	20,811,856	29,676,603

SOURCE: Michigan Department of Natural Resources, special release.

a. Detour is administrated by Straits; Palms Book by Indian Lake; Leelanau by Traverse City; Duck Lake by Muskegon; and Sanilac by Port Crescent.

b. No camping permitted.

c. Under development.

n.a.: not available.

TABLE XI-5. VISITOR DAYS OF USE OF NATIONAL FORESTS LOCATED IN MICHIGAN AND THE UNITED STATES: 1970-1983

(In millions of visitor days)

Year	Michigan				United States total
	Huron-Manistee	Hiawatha	Ottawa	Total	
1970	1,664.0	1,587.6	991.2	4,242.8	172,554.5
1971	1,770.8	1,739.8	1,064.0	4,574.6	178,109.5
1972	1,901.3	1,704.1	1,117.0	4,722.4	183,958.3
1973	1,842.1	1,854.9	1,187.8	4,884.8	188,174.6
1974	1,955.6	1,821.9	1,240.5	5,018.0	192,915.8
1975	1,940.0	2,002.7	1,208.4	5,151.1	199,200.8
1976	2,154.8	2,030.3	1,289.6	5,474.7	199,928.1
1977	2,378.0	1,833.6	1,334.1	5,545.7	204,797.4
1978	2,390.2	1,749.2	1,363.4	5,502.8	218,496.3
1979	2,183.8	1,571.6	1,260.3	5,015.7	236,301.7
1980	2,652.7	1,683.3	1,150.8	5,486.8	233,549.3
1981	2,183.8	1,571.6	1,260.3	5,015.7	235,709.2
1982	2,853.0	1,675.0	1,124.0	5,626.7	233,438.0
1983	2,720.0	1,602.0	1,075.0	5,384.3	227,708.0

SOURCE: U.S. Forest Service, special release.

TABLE XI-6. VISITORS TO ISLE ROYALE NATIONAL PARK AND TO PICTURED ROCKS AND SLEEPING BEAR DUNES NATIONAL LAKESHORES: 1970-1983

Year	Isle Royale	Pictured Rocks[a]	Sleeping Bear Dunes[b]
1970	14,411	--	--
1971	15,868	--	--
1972	16,116	287,094[c]	--
1973	15,439	296,537	--
1974	13,934	298,856	--
1975	16,818	279,262	775,000
1976	16,000	317,000	800,000
1977	16,676	297,189	837,976
1978	16,415	289,902	759,000
1979	14,810	272,416	733,463
1980	14,996	313,040	689,274
1981	14,564	331,815	759,014
1982	13,250	359,671	664,945
1983	12,296	443,286	685,208

SOURCE: Isle Royale National Park, Pictured Rocks National Lakeshore, and Sleeping Bear Dunes National Lakeshore, special releases.

a. Records not available prior to 1972.
b. Records not available prior to 1975.
c. Eleven-month total, beginning with February.

TABLE XI-7. NUMBER OF RESIDENT AND NONRESIDENT HUNTING LICENSES ISSUED IN MICHIGAN: 1969-1982

	Small game		Deer-firearm		Deer-bow	
Year	Resident[a]	Nonresident	Resident[a]	Nonresident	Resident[a]	Nonresident
1969	569,696	5,687	641,863	14,990	61,342	4,043
1970	581,855	6,202	616,173	12,729	58,234	3,584
1971	465,201	5,683	492,024	10,189	35,514	2,985
1972	445,589	6,396	455,304	9,108	30,400	2,576
1973	515,101	7,803	494,567	10,169	38,287	2,735
1974	564,476	8,609	551,928	11,820	46,269	2,851
1975	558,520	8,866	587,091	13,710	54,391	3,582
1976	503,165	7,601	535,550	13,781	57,184	4,287
1977	421,700	7,847	482,002	14,990	62,013	5,464
1978	353,073	7,059	522,520	16,388	--	6,793
1979	318,799	6,900	519,505	16,030	--	7,300
1980	378,365	5,571	651,333	10,597	152,521	4,039
1981	365,951	5,839	668,146	10,714	168,556	4,401
1982	335,895	5,795	649,018	10,339	177,620	4,903

SOURCE: Michigan Department of Natural Resources, secial release.
a. Includes senior resident.

TABLE XI-8. NUMBER OF RESIDENT AND NONRESIDENT FISHING LICENSES ISSUED IN MICHIGAN: 1969-1982

	Resident		Nonresident		
Year	Senior	Annual[a]	7-day	Annual	Trout stamp[b]
1969	92,301	806,532	46,273	128,614	292,523
1970	92,932	807,703	50,121	133,196	303,774
1971	97,169	837,462	53,164	137,460	312,432
1972	99,540	811,393	34,977	127,218	308,630
1973	103,805	832,539	35,175	131,671	311,565
1974	91,938	871,557	33,832	131,516	324,865
1975	95,206	916,571	36,907	137,919	352,207
1976	95,331	817,088	--	106,028	278,130
1977	94,659	770,299	--	99,971	253,235
1978	95,469	738,324	--	94,089	239,601
1979	94,069	718,779	--	91,278	271,618
1980	98,943	712,813	--	114,522	236,386
1981	125,333	865,394	--	72,078	354,703
1982	127,551	870,664	--	73,909	365,954

SOURCE: Michigan Department of Natural Resources, special release.
a. Includes 7-day licenses issued during 1968-1972.
. Resident and nonresident.
n.a.: not applicable.

TABLE XI-9. NUMBER OF REPORTED FOREST FIRES IN MICHIGAN AND ACREAGE BURNED AS A RESULT: 1970-1982

Year	Lightning	Campfire	Tobacco smoking	Debris burning	Incendiary	Equipment use	All other	Total
				Number of fires				
1970	39	64	203	461	152	239	237	1,395
1971	25	79	212	347	91	293	163	1,210
1972	17	66	166	324	77	223	187	1,060
1973	7	47	142	295	83	139	119	832
1974	20	45	176	343	109	196	140	1,029
1975	40	77	204	225	79	42	186	853
1976	99	159	258	296	131	103	295	1,341
1977	72	122	223	329	169	155	363	1,433
1978	8	68	120	160	95	47	223	721
1979	7	44	67	113	73	52	116	472
1980	16	65	96	303	116	88	159	843
1981	14	64	108	224	132	87	195	824
1982	11	36	52	178	52	44	113	486
				Acres burned				
1970	56	255	741	2,844	581	947	1,069	6,492
1971	60	449	1,344	1,630	831	993	287	5,597
1972	24	630	1,151	1,628	553	804	864	5,654
1973	7	160	615	1,069	322	241	250	2,664
1974	80	195	1,566	2,176	999	608	464	6,087
1975	143	342	1,041	1,467	4,788	275	8,715	16,775
1976	19,264	645	1,626	1,122	923	505	1,385	25,470
1977	805	710	1,396	3,911	1,563	2,074	1,650	12,109
1978	17	207	513	420	420	159	795	2,639
1979	15	113	152	410	1,049	391	169	2,299
1980	68	353	1,211	1,733	1,410	1,347	3,157	9,279
1981	102	258	404	2,821	2,620	410	1,892	7,607
1982	151	672	231	816	581	362	1,187	3,989

SOURCE: Michigan Department of Natural Resources, Forest Management Division, special release.

TABLE XI-10. LAND AREA AND INLAND WATER AREA OF MICHIGAN COUNTIES: AS OF 1981

(In square miles)

County	Land	Water	County	Land	Water
Alcona	679.01	16.50	Lake	567.77	6.20
Alger	911.66	36.60	Lapeer	658.04	4.40
Allegan	832.05	11.20	Leelanau	341.39	25.00
Alpena	567.49	34.10	Lenawee	752.54	8.95
Antrim	480.17	44.50	Livingston	574.33	11.00
Arenac	367.40	4.41	Luce	904.46	22.60
Baraga	900.80	27.96	Mackinac	1,025.49	66.60
Barry	560.09	16.80	Macomb	482.42	.30
Bay	447.30	7.45	Manistee	542.86	15.00
Benzie	322.23	26.50	Marquette	1,821.42	51.88
Berrien	576.10	4.30	Mason	494.48	16.41
Branch	508.03	11.10	Mecosta	560.21	10.00
Calhoun	711.50	6.90	Menominee	1,045.28	6.10
Cass	496.22	14.40	Midland	525.04	3.10
Charlevoix	420.99	36.80	Missaukee	564.86	7.50
Cheboygan	720.19	77.30	Monroe	556.69	6.90
Chippewa	1,590.20	184.77	Montcalm	712.58	7.60
Clare	570.03	6.10	Montmorency	550.03	12.10
Clinton	573.07	1.64	Muskegon	507.04	19.67
Crawford	558.84	4.60	Newaygo	846.79	15.33
Delta	1,173.25	25.50	Oakland	874.88	32.50
Dickinson	770.27	7.15	Oceana	540.88	5.07
Eaton	579.29	.90	Ogemaw	569.60	5.50
Emmet	467.87	16.50	Ontonagon	1,310.83	15.30
Genesee	641.55	8.02	Osceola	568.70	4.00
Gladwin	505.34	10.66	Oscoda	568.00	3.61
Gogebic	1,105.15	39.00	Otsego	515.64	10.53
Grand Traverse	466.21	27.80	Ottawa	567.09	8.70
Gratiot	570.44	1.09	Presque Isle	655.57	32.70
Hillsdale	602.91	3.60	Roscommon	528.08	52.00
Houghton	1,013.60	30.00	Saginaw	815.28	.40
Huron	829.76	22.20	St. Clair	734.27	17.30
Ingham	559.71	1.10	St. Joseph	502.54	15.47
Ionia	577.03	3.30	Sanilac	964.40	.00
Iosco	545.97	19.40	Schoolcraft	1,173.39	47.70
Iron	1,163.08	48.00	Shiawassee	540.36	.30
Isabella	576.59	1.30	Tuscola	812.08	5.10
Jackson	704.68	18.80	Van Buren	611.40	12.50
Kalamazoo	561.97	18.30	Washtenaw	710.25	12.50
Kalkaska	562.96	7.40	Wayne	615.10	20.00
Kent	861.77	10.90	Wexford	565.65	10.80
Keweenaw	543.48	49.30	MICHIGAN	56,953.96	73.27

SOURCE: U.S. Bureau of the Census, special release.

XII. AGRICULTURE AND FORESTRY

Michigan Agricultural Statistics is an annual publication of the Michigan Department of Agriculture. Many of the data in this chapter are statistics that appeared in the latest edition.

The Agricultural Experiment Station and the Extension Service at Michigan State University also are sources of information. A list of the research reports issued by the Agricultural Experiment Station is available on request.

Income and employment statistics on agriculture in Michigan counties are prepared annually by the Bureau of Economic Analysis, U.S. Department of Commerce. These are the most comprehensive accounts of agricultural activity for individual counties. They form the basis for the evaluation of agriculture's importance in Table XII-22.

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TABLE XII-1. NUMBER OF FARMS AND FARM ACREAGE IN MICHIGAN AND THE UNITED STATES, SELECTED YEARS: 1900-1982

	Old farm definition			New farm definition		
Year	Number of farms	Average size of farm (acres)	Total land in farms (000 acres)	Number of farms	Average size of farm (acres)	Total land in farms (000 acres)
			Michigan			
1900	203,261	86	17,562	n.a.	n.a.	n.a.
1910	206,960	92	18,941	n.a.	n.a.	n.a.
1920	196,447	97	19,033	n.a.	n.a.	n.a.
1930	179,000	101	18,000	n.a.	n.a.	n.a.
1940	190,000	97	18,400	n.a.	n.a.	n.a.
1950	161,000	111	17,900	n.a.	n.a.	n.a.
1960	118,000	131	15,400	n.a.	n.a.	n.a.
1970	84,000	151	12,700	n.a.	n.a.	n.a.
1975	76,000	155	11,800	70,000	164	11,500
1976	75,000	156	11,700	70,000	163	11,400
1978	72,000	158	11,400	66,000	173	11,400
1979	n.a.	n.a.	n.a.	66,000	173	11,400
1980	n.a.	n.a.	n.a.	66,000	173	11,400
1981	n.a.	n.a.	n.a.	66,000	174	11,500
1982	n.a.	n.a.	n.a.	65,000	177	11,500
			United States (Farms in thousands)			
1900	5,737	147	838,592	n.a.	n.a.	n.a.
1910	6,361	138	878,798	n.a.	n.a.	n.a.
1920	6,448	149	955,884	n.a.	n.a.	n.a.
1930	6,295	157	990,112	n.a.	n.a.	n.a.
1940	6,102	175	1,065,114	n.a.	n.a.	n.a.
1950	5,388	216	1,161,420	n.a.	n.a.	n.a.
1960	3,963	297	1,175,646	n.a.	n.a.	n.a.
1970	2,949	374	1,102,371	n.a.	n.a.	n.a.
1975	2,767	391	1,081,448	2,521	420	1,059,420
1976	2,738	394	1,078,263	2,497	422	1,054,075
1978	2,680	400	1,072,333	2,436	429	1,044,790
1979	n.a.	n.a.	n.a.	2,430	429	1,043,195
1980	n.a.	n.a.	n.a.	2,428	429	1,042,245
1981	n.a.	n.a.	n.a.	2,436	429	1,044,700
1982	n.a.	n.a.	n.a.	2,437	429	1,045,805

SOURCE: Michigan Agricultural Reporting Service, Michigan Agricultural Statistics.

NOTE: The old farm definition included places of 10 or more acres that had annual sales of $50 or more, or that were smaller but had sales of $250 or more. The new farm definition includes places of any size that had annual sales of agricultural products of $1,000 or more.

n.a.: not available.

TABLE XII-2. GROSS FARM INCOME, PRODUCTION EXPENSES, AND REALIZED NET INCOME IN MICHIGAN AND U.S. AGRICULTURE: 1950-1981

	Total ($000,000)			Per farm ($)		
Year	Gross income	Production expenses	Net farm income[c]	Gross income	Production expenses	Net farm income[c]
			Michigan			
1950-1954[a]	833	508	325	5,507	3,342	2,165
1955-1959[a]	835	571	244	6,365	4,478	1,887
1960-1964[a]	919	663	256	8,386	6,053	2,333
1965-1969[a]	1,033	754	279	11,265	8,235	3,030
1970-1974[a]	1,411	1,028	383	17,396	12,661	4,735
1976	1,950	1,593	321	25,994	21,241	4,284
1977[b]	2,251	1,747	466	33,101	25,609	6,851
1978	2,395	1,942	468	36,267	29,033	7,091
1979	2,665	2,248	518	40,379	33,718	7,846
1980	3,139	2,646	461	47,557	n.a.	6,983
1981	3,232	2,893	486	48,966	n.a.	7,361
			United States			
1950-1954[a]	34,996	21,574	13,422	6,739	4,159	2,683
1955-1959[a]	35,571	24,309	11,262	8,168	5,538	2,637
1960-1964[a]	41,258	29,931	11,327	11,193	8,126	3,126
1965-1969[a]	50,791	37,996	12,795	16,073	12,044	4,162
1970-1974[a]	76,949	56,376	20,574	26,971	19,768	7,506
1975	96,938	75,863	24,475	35,037	27,420	8,846
1976	104,177	83,130	18,682	38,051	30,364	6,823
1977[b]	107,313	90,293	18,391	43,843	36,767	7,563
1978	126,972	101,087	26,458	51,790	41,493	10,941
1979	146,570	119,217	32,697	59,963	49,062	13,312
1980	n.a.	n.a.	n.a.	63,802	n.a.	8,289
1981	n.a.	n.a.	n.a.	66,189	n.a.	10,312

SOURCE: K.T. Wright and Daniel A. Dueweke, The Changing Scene in Michigan Agriculture, Extension Bulletin E-1253 (East Lansing: Cooperative Extension Service, Michigan State University, 1978), Table 7; Farm Income Statistics (Washington, D.C.: Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture, 1978), Tables 1H and 3H; and Michigan Agricultural Reporting Service, Michigan Agricultural Statistics.

a. Five-year average.

b. Beginning with 1977, based on the 1974 Census of Agriculture definition of a farm with sales of $1,000 or more.

c. Includes changes in inventories.

n.a.: not available

TABLE XII-3. PRODUCTION EXPENSES OF FARMS IN MICHIGAN, BY CATEGORY: 1950-1981

	Current operating expenses ($000,000)												
Year	Feed	Live-stock	Fertilizer and lime	Seeds	Repairs & mainte-nance	Hired labor	Miscella-neous	Total	Deprecia-tion	Taxes	Inter-est	Rent	Total
1950-1954[a]	59.8	13.8	25.9	14.4	89.2	58.3	48.6	310.0	92.0	15.6	7.6	15.0	440.2
1955 1959[a]	67.3	19.0	38.1	16.0	110.6	49.8	63.2	364.0	132.6	24.4	10.7	8.4	540.1
1960 1964[a]	75.4	20.6	36.7	14.1	118.3	59.9	85.2	410.1	151.3	36.7	16.9	6.5	621.6
1965 1969[a]	80.9	16.2	43.2	17.9	111.1	53.5	96.4	419.2	159.4	48.1	28.8	9.0	664.5
1972	93.9	24.0	71.9	31.2	114.1	105.0	167.0	607.1	211.3	69.4	47.4	9.1	944.3
1973	141.2	33.1	74.7	43.8	127.9	110.3	185.4	716.4	244.6	78.6	55.4	22.5	1117.5
1974	165.3	32.3	147.1	59.7	156.9	126.0	201.3	888.6	289.7	91.1	67.1	19.4	1355.9
1975	154.9	30.6	149.2	58.8	179.5	116.0	229.0	917.9	323.6	105.2	78.1	12.3	1437.0
1976	181.5	29.6	156.8	71.1	208.6	125.4	249.5	1022.5	357.1	121.3	86.9	5.3	1593.1
1977	177.9	28.6	171.8	74.2	253.6	135.6	281.3	1123.0	388.6	122.9	98.2	8.7	1741.4
1978	170.9	33.1	181.8	81.2	285.6	165.4	326.7	1224.8	443.4	133.2	113.6	7.4	1942.4
1979	192.5	54.0	199.9	91.1	336.9	189.7	393.7	1457.7	492.2	149.7	140.1	8.3	2248.0
1980	212.4	67.0	247.5	103.1	434.1	246.2	440.6	1712.7	569.1	178.2	170.5	15.5	2645.9
1981	221.2	51.8	258.5	121.8	434.4	259.8	527.3	1874.8	606.9	199.2	202.1	10.1	2893.2

SOURCE: K.T. Wright and Daniel A. Dueweke, The Changing Scene in Michigan Agriculture, Extension Bulletin E-1253 (East Lansing: Cooperative Extension Service, Michigan State University, 1978), Table 4; and Michigan Agricultural Reporting Service, Michigan Agricultural Statistics.

a. Five-year average.

TABLE XII-4. ACREAGE AND PRODUCTION OF MAJOR MICHIGAN CROPS: 1950-1982

Crop	1950-1954[a]	1955-1959[a]	1960-1964[a]	1965-1969[a]	1970-1974[a]	1978	1979	1980	1981	1982
					Harvested acreage (Thousands of acres)					
All corn	1,729	1,913	1,895	1,734	2,063	2,820	2,870	2,925	3,170	3,130
Winter wheat	1,269	1,037	1,019	839	604	410	735	800	830	600
Oats	1,331	1,056	745	519	376	410	310	335	340	450
Tame hay	2,383	2,026	1,791	1,549	1,320	1,430	1,330	1,310	1,270	1,370
Soybeans	121	221	300	481	569	900	1,010	950	970	1,040
Dry beans[b]	382	504	567	600	577	520	460	570	590	550
Sugar beets	62	68	74	80	85	92	88	97	99	97
Potatoes	67	50	45	44	42	42	41	40	38	41
Vegetables	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	55	56	63
Fruit	167[b]	160	152	152	157	110	105	105	106	106
All crops	8,011	7,449	6,870	6,235	6,062	6,811	7,163	7,234	7,518	7,508
					Production (Thousands of units)					
All corn (bu)[c]	62,227	82,662	92,302	93,193	124,393	194,400	237,500	247,000	273,600	307,380
Winter wheat (bu)	35,142	33,000	36,365	30,849	23,084	16,400	31,605	35,200	41,500	24,600
Oats (bu)	48,049	50,820	37,215	27,392	19,988	23,370	18,910	20,100	21,080	28,350
Tame hay (tons)	3,631	3,329	3,356	3,330	3,065	3,857	3,833	3,844	3,894	4,379
Soybeans (bu)	2,334	4,990	6,783	10,904	13,397	21,600	30,300	30,400	29,100	32,240
Dry beans (cwt)	3,571	5,014	7,437	6,775	6,231	5,980	6,440	7,752	7,198	7,425
Sugar beets (tons)	699	980	1,153	1,355	1,571	1,770	1,550	1,892	2,030	1,853
Potatoes (cwt)[d]	12,468	11,734	13,708	14,678	16,089	9,953	9,540	9,022	8,503	9,645
Fruit (000 lb)	n.a.	n.a.	n.a.	n.a.	n.a.	1,386	1,032	1,291	985	1,411
Vegetables (cwt)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8,301	9,774	12,178

SOURCE: K.T. Wright and Daniel A. Dueweke, *The Changing Scene in Michigan Agriculture*, Extension Bulletin E-1253 (East Lansing: Cooperative Extension Service, Michigan State University, 1978), Tables 1 and 2; and Michigan Agricultural Reporting Service, *Michigan Agricultural Statistics*.

a. Five-year average.

b. Production per acre in pounds

c. Grain only, excludes silage.

d. Measured in bushels prior to 1978.

TABLE XII-6. MICHIGAN CASH RECEIPTS FROM FARM MARKETINGS: 1974-1981

(In thousands of dollars)

Item	1974	1975	1976	1977	1978	1979	1980	1981
Livestock and products	687,857	732,935	812,249	831,355	984,560	1,003,800	1,137,596	1,111,057
Dairy	353,860	376,312	447,786	452,265	496,661	571,725	647,602	694,072
Cattle and calves	168,729	175,714	168,812	197,986	306,803	208,565	257,567	182,257
Hogs	86,762	101,511	102,205	91,094	87,278	124,490	135,678	129,020
Eggs	53,813	55,556	67,312	61,898	57,811	61,336	57,760	68,670
Sheep and lambs	4,819	3,376	2,874	3,889	5,320	4,116	5,439	3,332
All chickens	1,898	3,784	3,272	2,932	3,871	5,438	3,640	3,366
Wool	701	322	549	744	697	682	703	683
Other	17,275	16,360	19,439	20,547	26,119	27,448	29,207	29,677
Crops	963,982	914,769	908,828	1,119,141	1,071,697	1,317,666	1,626,870	1,678,160
Field crops								
Corn	216,374	219,156	262,828	286,968	248,791	318,719	511,355	481,805
Dry edible beans	99,320	129,744	78,857	111,802	80,783	111,234	149,250	201,240
Soybeans	100,569	63,726	79,251	134,660	97,133	194,586	227,372	165,325
Sugarbeets	64,790	43,524	34,496	36,100	41,595	60,295	77,004	79,772
Wheat	95,236	113,701	81,360	82,324	50,355	102,468	121,899	138,162
Potatoes	48,274	34,142	36,975	40,961	37,269	38,256	56,688	55,183
Hay	18,629	30,154	24,849	26,160	32,403	23,267	20,210	27,077
Oats	15,411	16,644	18,800	16,247	15,204	16,635	22,011	25,511
Mint	1,111	1,281	1,186	1,304	1,310	1,475	1,498	1,821
Red clover seed	1,508	765	1,882	1,041	813	745	580	561
Rye	727	515	476	418	681	984	866	868
Barley	1,352	1,053	1,790	1,740	1,492	1,315	1,332	1,820
Vegetables	94,735	84,329	95,501	111,991	128,437	118,911	123,228	148,920
Other	8,389	8,641	12,146	17,794	17,568	20,441	23,543	26,232

TABLE XII-6. MICHIGAN CASH RECEIPTS FROM FARM MARKETINGS: 1974-1981 (cont.)

(In thousands of dollars)

Item	1974	1975	1976	1977	1978	1979	1980	1981
Fruit								
Apples	44,802	36,055	39,009	52,914	73,192	75,204	73,195	79,417
Blueberries[a]	n.a.	10,880	15,450	8,378	17,820	16,164	16,400	26,572
Cherries	46,875	25,455	27,831	57,901	73,370	59,359	40,797	52,610
Grapes	8,688	7,170	2,179	7,072	15,000	13,810	11,825	14,298
Peaches	8,108	7,290	5,584	8,502	9,504	6,693	7,584	7,486
Strawberries	5,503	5,297	5,798	6,280	7,973	10,041	7,001	8,448
Pears	1,616	2,023	1,512	1,673	2,930	1,703	2,141	1,923
Plums and prunes	2,076	2,353	2,105	1,953	3,279	2,848	2,550	3,731
Other	12,976	688	15,805	8,872	777	971	1,030	1,108
Other products								
Forest and maple	11,303	8,927	12,002	12,657	14,768	16,475	17,744	18,062
Greenhouse, nursery	55,610	61,276	66,606	91,807	99,250	105,067	109,767	110,200
All commodities	1,651,839	1,657,704	1,721,077	1,950,496	2,056,257	2,321,466	2,764,466	2,789,217
Government payments	10,498	13,276	7,300	21,195	45,510	15,593	10,666	17,263
TOTAL	1,662,277	1,660,980	1,728,377	1,971,691	2,101,767	2,377,059	2,775,132	2,806,480

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics, 1977 through 1983 (Lansing: annually), and special release (1979 selected updated data).

a. Prior to 1975, blueberries included in other.

TABLE XII-7. MICHIGAN INDEXES OF PRICES RECEIVED BY FARMERS, U.S. PRICES PAID BY FARMERS, AND RATIO: 1910-1982

Item	1910-1914	1935-1939	1947-1949	1970	1978	1979	1980	1981	1982
Livestock									
All livestock	19	23	55	65	116	133	137	138	138
Dairy products	16	19	45	60	109	125	136	143	141
Meat animals	17	21	57	70	156	147	135	142	135
Poultry and eggs	49	55	113	73	101	106	102	120	99
Crops									
All crops	22	21	55	51	106	113	126	132	118
Cash field	25	25	65	51	107	114	131	160	127
Fruits	17	17	41	44	118	125	134	107	109
Vegetables	--	13	34	56	91	92	104	137	121
Feed crops	39	31	73	56	102	110	122	121	115
All products	20	23	55	58	111	123	131	135	127

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics.

NOTE: Indexes are calculated using 1977 as the base year.

a. Ratio of Michigan index of prices received for all farm products to U.S. index of prices paid for commodities, services, interest, taxes, and wage rates.

TABLE XII-8. PRICES RECEIVED BY MICHIGAN FARMERS FOR CROPS, LIVESTOCK, POULTRY, AND PRODUCTS: 1973-1982

Item	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Hogs ($ per cwt)	39.50	35.80	48.00	44.70	40.50	47.60	42.90	38.80	43.70	52.50
Beef cattle ($ per cwt)	40.20	36.30	33.50	33.00	32.80	44.20	58.20	55.90	49.50	48.00
Veal calves ($ per cwt)	62.40	45.00	30.40	35.40	38.80	61.60	86.60	82.50	65.20	57.20
Sheep ($ per cwt)	13.60	11.40	11.20	13.70	13.80	20.30	28.00	27.90	19.80	18.50
Lambs ($ per cwt)	36.60	38.60	43.80	47.80	51.60	62.10	66.60	63.20	51.90	54.50
Milk ($ per cwt wholesale)	7.20	8.22	8.55	9.85	9.65	10.50	12.00	13.20	13.80	13.60
Chickens (¢ per lb)	11.80	8.30	14.50	12.00	10.00	11.00	12.00	9.00	8.50	8.50
Eggs (¢ per doz)	49.60	48.40	45.30	53.40	49.60	46.50	50.00	48.00	54.00	51.00
Wool ($ per lb)	.63	.47	.29	.51	.67	.67	.73	.74	.70	.44
Corn, grain ($ per bu)	2.52	2.85	2.35	2.04	1.92	2.22	2.46	3.05	2.39	2.20^P
Wheat ($ per bu)	4.30	3.80	3.22	2.53	2.02	3.30	3.82	3.60	3.47	3.20^P
Oats ($ per bu)	1.35	1.60	1.39	1.56	1.27	1.25	1.45	1.85	1.97	1.45^P
Soybeans ($ per bu)	5.73	6.40	4.78	7.22	5.54	6.81	6.13	7.47	6.02	5.35
Dry beans ($ per cwt)	27.30	16.00	25.90	16.10	18.30	14.80	18.50	26.40	25.60	12.30
All potatoes ($ per cwt)	6.13	4.15	5.56	4.17	4.14	4.57	4.44	6.65	6.30	4.75
All hay ($ per ton)	31.00	37.50	44.00	43.00	58.50	45.50	36.00	36.50	56.50	61.50

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics.
P. Preliminary
NOTE: Marketing year, except 1980 which is calendar year.

TABLE XII-9. NUMBER OF WORKERS ON MICHIGAN FARMS: 1973-1982

(Annual averages in thousands of persons)

Workers	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Family	98	95	83	83	77	90	80	79	#	58
Hired	23	24	27	29	25	47	48	51	#	45
Total	121	119	110	112	102	137	128	130	#	103

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics.

#. Data not collected in 1981.

TABLE XII-10. FIRST FIVE RANKING COUNTIES IN MICHIGAN FOR SELECTED CROP PRODUCTION: 1982

Item	1	2	3	4	5
Corn, grain	Lenawee	Huron	Tuscola	Sanilac	Branch
Winter wheat	Eaton	Tuscola	Saginaw	Lenawee	Gratiot
Oats	Sanilac	Huron	Shiawassee	Tuscola	Washtenaw
Soybeans	Saginaw	Lenawee	Monroe	Gratiot	Shiawassee
Dry beans	Huron	Tuscola	Gratiot	Sanilac	Saginaw
Sugar beets	Tuscola	Huron	Bay	Saginaw	Sanilac

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics.

TABLE XII-11. MICHIGAN YIELDS PER ACRE, NINE LEADING CROPS: 1975-1982

Item	1975	1976	1977	1978	1979	1980	1981	1982
Corn, grain (bu)	80.0	69.0	85.0	81.0	95.0	95.0	96.0	109.0
Winter wheat (bu)	38.0	38.0	40.0	40.0	43.0	44.0	50.0	41.0
Oats (bu)	56.0	51.0	55.0	57.0	61.0	60.0	62.0	63.0
Barley (bu)	47.0	46.0	52.0	47.0	47.0	53.0	52.0	56.0
Potatoes (cwt)	222	231	257	235	235	227	222	236
Soybeans (bu)	26.0	20.5	31.0	24.0	30.0	32.0	30.0	19.2
Dry beans (cwt)	9.1	10.0	11.8	11.5	14.0	13.6	12.2	13.5
Sugar beets (tons)	19.2	16.8	21.0	19.3	17.6	19.5	20.5	19.2
Hay, all (tons)	2.5	2.4	2.2	2.7	2.9	2.9	3.1	3.2

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics.

TABLE XII-12. QUANTITY AND VALUE OF LIVESTOCK AND POULTRY ON FARMS, MICHIGAN AND THE UNITED STATES: 1 JANUARY 1979-1983

	Michigan			United States		
Species and year	Number (1,000)	Value per head or bird	Total value ($1,000)	Number (1,000)	Value per head or bird	Total value ($1,000)
All cattle and calves						
1979	1,250	500.00	625,000	110,864	403.00	44,697,773
1980	1,310	640.00	838,400	111,192	502.00	55,831,294
1981	1,340	660.00	884,400	114,321	475.00	54,292,044
1982	1,450	580.00	841,000	115,604	415.00	47,966,517
1983	1,500	540.00	810,000	115,201	406.00	46,749,210
All hogs (including pigs)[a]						
1979	925	84.00	68,040	60,100	83.30	5,004,269
1980	1,040	59.00	61,360	67,353	56.10	3,774,920
1981	830	79.50	65,985	64,512	74.70	4,820,793
1982	690	73.00	50,370	58,688	70.10	4,113,725
1983	760	87.00	66,120	53,230	89.90	4,783,560
All sheep and lambs						
1979	121	55.00	6,655	12,220	71.70	875,927
1980	132	68.00	8,976	12,687	78.20	992,127
1981	124	75.00	9,300	12,936	69.80	903,332
1982	130	64.00	8,320	12,966	56.90	737,777
1983	100	58.00	5,800	11,904	51.70	615,691
All chickens[a]						
1979	8,140	1.55	12,617	396,933	1.75	696,019
1980	8,000	1.45	11,600	400,585	1.81	726,365
1981	8,200	1.35	11,070	392,110	1.88	738,646
1982	8,100	1.50	12,150	384,838	1.89	727,188
1983	7,800	1.45	11,310	378,509	1.85	701,273
Turkeys - breeder hens[a]						
1979	40	16.00	640	3,370	12.53	42,222
1980	44	13.00	572	3,705	13.58	50,304
1981	52	18.00	936	3,749	14.11	52,887
1982	50	12.00	600	3,514	15.35	53,962
1983	45	14.00	630	3,429	14.60	50,053
Total value - all species						
1979	--	--	712,952	--	--	51,316,210
1980	--	--	920,908	--	--	61,375,010
1981	--	--	971,691	--	--	60,807,702
1982	--	--	912,440	--	--	53,599,169
1983	--	--	893,860	--	--	52,899,787

SOURCE: Michigan Department of Agriculture, *Michigan Agricultural Statistics*.

[a] 1 December of previous year.

TABLE XII-13. QUANTITY OF LIVESTOCK AND POULTRY ON MICHIGAN FARMS, BY CLASS: 1 JANUARY 1979-1983

(In 1,000 head)

Species and class	1979	1980	1981	1982	1983
Cattle and calves					
Classification by sex and weight					
Cows and heifers that have calved	540	540	530	610	615
Beef cows	138	140	140	214	215
Milk cows	402	400	390	396	400
Heifers, 500 pounds and over	223	257	260	254	275
For beef cow replacement	19	25	36	35	52
For milk cow replacement	149	193	174	179	171
Other heifers	55	39	50	40	52
Steers, 500 pounds plus	187	181	177	190	188
Bulls, 500 pounds plus	19	22	19	20	24
Calves, less than 500 pounds	281	310	354	376	398
All cattle and calves	1,250	1,310	1,340	1,450	1,500
Hogs[a]					
All hogs	925	1,040	830	690	760
Breeding hogs	158	161	120	105	127
Market hogs	767	879	710	585	633
Sheep and lambs					
Ewe lambs	14	16	15	16	12
Wether and ram lambs	3	3	4	4	3
Ewes, 1 year plus	75	82	80	83	68
Rams and wethers, 1 year plus	3	3	3	3	2
Total stock sheep	95	104	102	106	85
Sheep and lambs on feed	26	28	22	24	15
All sheep and lambs	121	132	124	130	100
Chickens[a]					
Pullets of laying age	3,500	3,850	3,860	3,800	3,550
Hens	2,850	2,400	2,540	2,500	2,450
Hens and pullets of laying age	6,350	6,250	6,400	6,300	6,000
Pullets, 3 months plus	840	825	950	820	850
Pullets, less than 3 months	900	885	800	940	900
Other chickens	50	40	50	40	50
All chickens	8,140	8,000	8,200	8,100	7,800
Turkeys					
Breeding hens	40	44	52	50	45

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics.

a. 1 December inventory of previous year.

TABLE XII-5. MAJOR LIVESTOCK INVENTORY AND PRODUCTION OF MAJOR LIVESTOCK PRODUCTS IN MICHIGAN: 1950-1974 AND 1979-1983

Livestock or product	1950-1954[a]	1955-1959[a]	1960-1964[a]	1965-1969[a]	1970-1974[a]	1979	1980	1981	1982	1983
					Inventory, 1 January (thousands)					
All cattle & calves										
Milk cows	930	831	698	568	435	402	400	390	396	400
Beef cows	63	97	119	141	192	138	140	140	214	215
Cattle on feed	100	104	148	185	226	180	165	160	135	n.a.
Total	1,880	1,797	1,759	1,587	1,552	1,250	1,310	1,340	1,450	1,500
Hogs & pigs	812	739	809	652	756	925	1,040	830	690	760
Sheep & lambs	432	410	365	290	278	121	132	124	130	100
Chickens (all)	10,986	9,930	7,961	8,466	8,126	8,140	8,000	8,200	8,100	7,800
Turkeys (hens)	82	67	82	86	76	40	44	52	50	45
					Production (millions of pounds)					
Milk	5,409	5,272	5,485	4,897	4,670	4,830	4,970	5,103	5,253	n.a.
Cattle & calves	443	431	460	473	476	357	393	432	473	n.a.
Hogs	289	261	260	220	264	307	331	288	276	n.a.
Sheep & lambs	21	22	21	15	11	8	9	8	6	n.a.
Eggs (millions produced)	1,609	1,626	1,410	1,540	1,486	1,491	1,459	1,541	1,525	n.a.
Chickens (1,000 head raised)	16,623	11,014	6,067	5,638	5,800	5,000	5,250	5,650	5,100	n.a.
Turkeys (1,000 head raised)	1,049	1,162	1,241	1,158	1,040	1,200	1,450	1,550	1,400	n.a.
Commercial broilers (1,000 head raised)	3,485	4,350	2,732	1,200	697	2,570	1,552	1,130	1,180	n.a.

SOURCE: K.T. Wright and Daniel A. Dueweke, The Changing Scene in Michigan Agriculture, Extension Bulletin E-1253 (East Lansing: Cooperative Extension Service, Michigan State University, 1978), Tables 3 and 4; and Michigan Agricultural Reporting Service, Michigan Agricultural Statistics.

a. Five-year average.

n.a.: not available.

TABLE XII-14. ACREAGE, YIELD, PRODUCTION, AND VALUE OF MICHIGAN FIELD CROPS: 1978-1982

		Acreage		Production		Price received	Value of
Crop	Year	Planted (1,000)	Harvested (1,000)	Per acre (1,000)	Total (1,000)	per unit[a] (dollars)	production ($1,000)
Corn, all (bu)	1978	2,850	n.a.	n.a.	n.a.	n.a.	n.a.
	1979	2,900	n.a.	n.a.	n.a.	n.a.	n.a.
	1980	2,950	n.a.	n.a.	n.a.	n.a.	n.a.
	1981	3,200	n.a.	n.a.	n.a.	n.a.	n.a.
	1982	3,150	n.a.	n.a.	n.a.	n.a.	n.a.
Corn, grain (bu)	1978	n.a.	2,400	81.0	194,400	2.22	431,568
	1979	n.a.	2,500	95.0	237,500	2.46	584,250
	1980	n.a.	2,600	95.0	247,000	3.05	753,350
	1981	n.a.	2,850	96.0	273,600	2.39	653,904
	1982	n.a.	2,820	109.0	307,380	2.20	676,236
Corn, silage (ton)	1978	n.a.	420	12.5	5,250	16.30	85,575
	1979	n.a.	370	13.5	4,995	16.20	80,919
	1980	n.a.	325	13.5	4,388	19.20	84,250
	1981	n.a.	320	13.0	4,160	19.80	82,368
	1982	n.a.	310	13.5	4,185	19.40	81,189
Wheat, winter (bu)	1978	430	410	40.0	16,400	3.30	54,120
	1979	750	735	43.0	31,605	3.82	120,731
	1980	820	800	44.0	35,200	3.60	126,720
	1981	840	830	50.0	41,500	3.47	144,005
	1982	695	600	41.0	24,600	3.20	78,720
Oats (bu)	1978	440	410	57.0	23,370	1.25	29,213
	1979	330	310	61.0	18,910	1.45	27,420
	1980	355	335	60.0	20,100	1.85	37,185
	1981	360	340	62.0	21,080	1.97	41,528
	1982	475	450	63.0	28,350	1.45	41,108
Barley (bu)	1978	23	22	47.0	1,034	2.60	2,688
	1979	21	20	47.0	940	2.65	2,491
	1980	23	21	53.0	1,113	3.75	4,174
	1981	27	26	52.0	1,352	2.98	4,029
	1982	38	36	56.0	2,016	2.40	4,838
Rye (bu)	1978	130	25	24.0	600	2.05	1,230
	1979	135	25	25.0	625	2.75	1,719
	1980	130	21	24.0	504	2.85	1,436
	1981	130	19	28.0	532	2.90	1,543
	1982	135	22	29.0	638	3.00	1,914
Soybeans (bu)	1978	910	900	24.0	21,600	6.81	147,096
	1979	1,020	1,010	30.0	30,300	6.13	185,739
	1980	960	950	32.0	30,400	7.47	227,088
	1981	980	970	30.0	29,100	6.02	175,182
	1982	1,050	1,040	31.0	32,240	5.35	172,484
Dry beans[b]	1978	530	520	1,150	5,980	14.80	88,504
	1979	470	460	1,400	6,440	18.50	119,140
	1980	590	570	1,360	7,752	27.80	215,506
	1981	650	590	1,220	7,198	25.60	184,269
	1982	560	550	1,350	7,425	12.30	91,328
Potatoes[b], all	1978	43.5	42.3	235	9,953	4.57	45,479
	1979	41.9	40.6	235	9,548	4.44	42,411
	1980	41.0	39.8	227	9,022	6.65	59,788
	1981	40.5	38.3	222	8,503	6.30	53,602
	1982	43.0	40.8	236	9,645	4.75	45,658

TABLE XII-14. ACREAGE, YIELD, PRODUCTION, AND VALUE OF MICHIGAN FIELD CROPS: 1978-1982 (cont.)

Crop	Year	Acreage Planted (1,000)	Acreage Harvested (1,000)	Production Per acre (1,000)	Production Total (1,000)	Price received per unit[a] (dollars)	Value of production ($1,000)
Potatoes summer (cwt)	1978	8.5	8.3	175	1,453	4.80	6,974
	1979	8.9	8.6	180	1,548	4.40	6,811
	1980	8.5	8.3	195	1,619	6.75	10,928
	1981	8.5	8.3	175	1,453	7.05	10,244
	1982	8.0	7.8	200	1,560	n.a.	n.a.
Potatoes fall (cwt)	1978	35.0	34.0	250	8,500	4.53	38,505
	1979	33.0	32.0	250	8,000	4.45	35,600
	1980	32.5	31.5	235	7,403	6.60	48,860
	1981	32.0	30.0	235	7,050	6.15	43,358
	1982	35.0	33.0	245	8,085	n.a.	n.a.
Hay, all (ton)	1978	n.a.	1,430	2.70	3,857	45.50	175,494
	1979	n.a.	1,330	2.88	3,833	36.00	137,988
	1980	n.a.	1,310	2.93	3,844	36.50	140,306
	1981	n.a.	1,270	3.07	3,894	56.50	220,011
	1982	n.a.	1,370	3.20	4,379	61.50	269,309
Hay, alfalfa (ton)	1978	n.a.	1,140	2.90	3,306	n.a.	n.a.
	1979	n.a.	1,040	3.10	3,224	n.a.	n.a.
	1980	n.a.	1,020	3.20	3,264	n.a.	n.a.
	1981	n.a.	1,000	3.30	3,300	n.a.	n.a.
	1982	n.a.	1,050	3.50	3,675	n.a.	n.a.
Red clover seed[c] (lb)	1978	n.a.	25	85	2,125	49.00	1,041
	1979	n.a.	26	95	2,470	49.00	1,210
	1980	n.a.	16	95	1,520	53.00	806
	1981	n.a.	16	95	1,520	52.50	798
	1982	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Popcorn[d] (lb)	1978	2.2	2.1	3,450	7,250	8.20	595
	1979	5.5	5.4	3,400	18,360	9.00	1,652
	1980	7.0	6.9	2,750	18,980	9.60	1,822
	1981	7.0	6.9	3,500	24,150	12.80	3,091
	1982	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Maple syrup (gal)	1978	n.a.	n.a.	n.a.	80	14.00	1,120
	1979	n.a.	n.a.	n.a.	85	16.00	1,360
	1980	n.a.	n.a.	n.a.	83	17.10	1,419
	1981	n.a.	n.a.	n.a.	91	19.40	1,765
	1982	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Spearmint, for oil (lb)	1978	n.a.	3.6	29	104	12.60	1,310
	1979	n.a.	3.8	31	118	13.00	1,534
	1980	n.a.	3.7	29	107	13.70	1,466
	1981	n.a.	3.8	31	118	15.50	1,829
	1982	n.a.	3.9	32.0	125	14.30	1,788
Sugarbeets(ton)	1978	93.0	91.5	19.3	1,770	23.50	41,595
	1979	93.0	88.0	17.6	1,550	38.90	60,295
	1980	99.0	97.0	19.5	1,892	40.70	77,004
	1981	102.0	99.0	20.5	2,030	26.50	53,795
	1982	97.5	96.5	19.2	1,853	n.a.	n.a.

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics.

a. Marketing year
b. Production per acre in pounds.
c. Clean seed basis, and price per cwt.
d. Shelled corn basis, price per cwt.
n.a.: Not available.

TABLE XII-15. NUMBER OF TREES OF BEARING AGE, ACREAGE IN, AND PRODUCTION OF FRUIT CROPS IN MICHIGAN: 1978-1982

Fruit	Year	Trees of bearing age Number (1,000)	 Acres (1,000)	Production (million pounds) Total	 Utilized	Price received (dollars per cwt.)	Value of production ($1,000)
Apples	1978	2,800	43.3	920	890	7.60	67,640
	1979	2,700	40.5	680	680	7.80	53,040
	1980	2,750	41.0	900	900	6.10	52,800
	1981	2,750	41.0	640	640	8.80	56,320
	1982	2,750	41.0	950	950	7.90	74,700
Cherries, tart	1978	2,600	27.7	128	128	44.40	56,832
	1979	2,650	28.2	100	100	48.50	48,500
	1980	2,700	29.4	150	149	20.40	30,396
	1981	2,800	30.0	88	88	46.40	40,832
	1982	2,850	30.0	260	195	13.70	26,805
Cherries, sweet	1978	850	10.2	75	75	22.90	17,175
	1979	830	9.6	54	54	20.35	10,989
	1980	800	9.3	58	58	17.70	10,266
	1981	800	9.3	46	46	18.75	8,625
	1982	800	9.2	67	55	19.80	10,880
Peaches	1978	700	6.9	60	60	16.00	9,600
	1979	600	5.8	35	35	19.40	6,790
	1980	500	5.0	40	40	19.20	7,680
	1981	500	5.0	35	35	19.20	6,720
	1982	500	5.0	50	50	20.90	10,549

TABLE XII-15. NUMBER OF TREES OF BEARING AGE, ACREAGE IN, AND PRODUCTION OF FRUIT CROPS IN MICHIGAN: 1978-1982 (cont.)

		Trees of bearing age		Production (tons)		Price received (dollars per cwt.)	Value of production ($1,000)
Fruit	Year	Number (1,000)	Acres (1,000)	Total	Utilized		
Grapes	1978	7,000	14.0	67,500	67,500	223	15,053
	1979	7,000	14.0	58,500	58,500	237	13,865
	1980	7,000	14.0	49,500	49,500	240	11,880
	1981	7,000	14.0	53,000	53,000	271	14,363
	1982	7,000	14.0	58,500	58,500	259	15,148
Pears	1978	290	3.0	10,000	10,000	201	2,010
	1979	270	2.8	9,000	9,000	198	1,782
	1980	270	2.8	10,000	10,000	223	2,230
	1981	260	2.7	9,000	9,000	224	2,016
	1982	260	2.7	12,000	11,000	220	2,418
Prunes & Plums	1978	450	4.8	24,000	24,000	138	3,312
	1979	410	4.4	14,000	14,000	207	2,898
	1980	410	4.4	12,500	12,500	208	2,600
	1981	410	4.4	16,000	16,000	140	2,240
	1982	410	4.4	11,000	11,000	261	2,866

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics.

TABLE XII-19. MICHIGAN VEGETABLES FOR PROCESSING, ACREAGE, YIELD, PRODUCTION, AND VALUE: 1978-1982

Crop and season	Year	Acres planted	Acres harvested	Production: Per acre tons	Production: Total tons	Price received per ton	Value of production ($1,000)
Snap beans	1978	18,000	16,400	2.10	34,450	148.00	5,099
	1979	17,600	17,300	2.08	35,980	162.00	5,829
	1980	14,600	13,700	2.80	38,360	156.00	5,984
	1981	14,600	14,300	2.53	36,180	160.00	5,789
	1982	14,600	14,200	2.58	36,640	145.00	5,313
Tomatoes	1978	4,600	4,500	18.04	81,200	67.30	5,465
	1979	5,700	5,600	18.11	101,420	68.30	6,927
	1980	6,100	6,000	12.28	73,680	72.90	5,371
	1981	6,400	6,200	19.08	118,300	86.00	10,174
	1982	9,800	9,700	21.10	204,670	92.60	18,952

SOURCE: Michigan Department of Agriculture, special release.

NOTE: Processing vegetables estimated but not published to avoid disclosure of individual operations include: Beets, Cabbage for Kraut, Sweet Corn and Green Pears.

TABLE XII-20. ONION PRODUCTION AND UTILIZATION IN MICHIGAN: 1978-1982

(1,000 cwt)

Year	Sales: Before Jan. 1	Sales: After Jan. 1	Sales: Total	Shrinkage: Before Jan. 1	Shrinkage: After Jan. 1	Total production	Total stocks Jan. 1[a]	Stocks as percentage of total production
1978	1,240	1,010	2,250	296	140	2,686	1,150	42.8
1979	1,290	950	2,240	271	175	2,686	1,125	41.9
1980	870	530	1,400	280	120	1,800	650	36.1
1981	1,240	850	2,090	256	100	2,446	950	38.8
1982	n.a.	n.a.	n.a.	n.a.	n.a.	2,336	n.a.	n.a.

SOURCE: Michigan Department of Agriculture, special release.

a. Stocks for the following year.
n.a. Data not available.

TABLE XII-16. ACREAGE, PRODUCTION, AND VALUE OF MICHIGAN AGRICULTURAL PRODUCE FOR FRESH MARKET: 1978-1982

Crop and season	Year	Acres		Production		Price received (per cwt)	Value of production[a] ($1,000)
		Planted	Harvested	Per acre (cwt)	Total (1,000 cwt)		
Carrots	1978	6,500	6,100	265	1,614	9.69	15,632
	1979	6,700	6,600	260	1,713	7.82	13,403
	1980	6,800	5,600	239	1,340	11.70	15,704
	1981	7,000	5,600	235	1,316	9.43	12,408
	1982	7,500	6,700	255	1,709	7.59	12,977
Cauliflower	1978	1,200	1,100	50	55	28.50	1,567
	1979	1,200	1,100	70	77	27.70	2,132
	1980	1,200	1,000	50	50	36.50	1,824
	1981	1,200	1,000	62	62	37.90	2,350
	1982	1,300	1,200	58	70	28.70	2,009
Celery	1978	2,600	2,300	407	936	14.10	13,197
	1979	2,700	2,600	443	1,153	9.52	10,982
	1980	3,200	3,100	447	1,387	9.29	12,890
	1981	3,400	3,200	450	1,440	11.00	15,784
	1982	3,500	3,300	470	1,551	10.60	16,400
Strawberries	1978	2,900	2,800	75	210	38.00	7,973
	1979	2,900	2,800	70	196	51.20	10,041
	1980	2,800	2,700	65	176	47.50	8,358
	1981	2,800	2,700	65	176	47.10	8,296
	1982	2,800	2,700	80	216	53.10	11,476
Corn, sweet	1978	12,000	11,700	60	702	9.28	6,515
	1979	11,700	11,500	58	667	8.28	5,523
	1980	11,700	11,500	67	771	8.92	6,877
	1981	12,000	11,500	61	702	9.84	6,908
	1982	12,500	12,200	66	805	8.81	7,092

TABLE XII-16. ACREAGE, PRODUCTION, AND VALUE OF MICHIGAN AGRICULTURAL PRODUCE FOR FRESH MARKET: 1978-1982 (cont.)

Crop and season	Year	Acres		Production		Price received (per cwt)	Value of production[a] ($1,000)
		Planted	Harvested	Per acre (cwt)	Total (1,000 cwt)		
Lettuce	1978	1,500	1,300	220	286	13.70	3,918
	1979	1,500	1,400	200	280	22.00	6,160
	1980	1,600	1,200	210	252	19.30	4,864
	1981	1,400	1,200	215	258	22.00	5,676
	1982	1,600	1,500	250	375	13.80	5,175
Onions[a]	1978	8,200	7,900	340	2,686	5.77	12,983
	1979	8,000	7,900	340	2,686	4.69	10,506
	1980	7,500	7,200	250	1,800	13.20	18,480
	1981	7,500	7,300	335	2,446	10.70	22,898
	1982	7,500	7,300	320	2,336	6.23	12,043
Tomatoes	1978	3,900	3,600	105	378	18.70	7,069
	1979	3,600	3,400	120	408	25.10	10,241
	1980	3,700	3,400	110	374	24.50	9,163
	1981	3,600	3,400	115	391	24.50	9,580
	1982	3,800	3,500	115	403	19.60	7,899

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics.

a. For Onions-- value of sales.

TABLE XII-17. MICHIGAN STRAWBERRIES FOR FRESH MARKET AND PROCESSING, PRODUCTION, PRICE, AND VALUE: 1978-1982

	Fresh market			Processing		
Year	Production (1,000 cwt)	Price received per cwt	Value of production ($1,000)	Production (1,000 cwt)	Price received per cwt	Value of production ($1,000)
1978	140	42.00	5,880	3,500	598.00	2,093
1979	143	56.10	8,022	2,650	762.00	2,019
1980	137	51.10	7,001	1,950	696.00	1,357
1981	137	49.20	6,740	1,950	798.00	1,556
1982	173	55.00	9,515	2,150	912.00	2,043

SOURCE: Michigan Department of Agriculture, special release.

TABLE XII-18. MICHIGAN CARROTS FOR FRESH MARKET AND PROCESSING, PRODUCTION, PRICE, AND VALUE: 1978-1982

	Fresh market			Processing		
Year	Production (1,000 cwt)	Price received per cwt	Value of production ($1,000)	Production (tons)	Price received per ton	Value of production ($1,000)
1978	1,088	13.20	14,341	26,300	49.10	1,291
1979	1,129	10.70	12,104	29,200	44.50	1,299
1980	880	16.30	14,371	22,980	58.00	1,333
1981	830	13.50	11,205	24,310	49.50	1,203
1982	1,092	10.40	11,357	30,860	52.50	1,620

SOURCE: Michigan Department of Agriculture, special release.

NOTE: Disposition data not published for Cauliflower, Celery and Peppers.

TABLE XII-21. COUNTY ESTIMATES OF MAJOR FIELD CROP PRODUCTION IN MICHIGAN: 1982 (cont.)

	Crop							
County or district	Oats (bu)	Barley (bu)	Dry beans (cwt)	Sugarbeets[a] (tons)	Corn (bu)	Wheat (bu)	Soybeans (bu)	Potatoes (cwt)
Alcona	118,000	16,100	--	--	145,000	69,600	--	--
Alpena	484,000	29,400	--	--	289,000	235,000	2,700	--
Cheboygan	112,000	36,300	--	--	101,800	43,700	3,800	--
Crawford	6,000	--	--	--	--	--	--	--
Iosco	159,000	6,600	--	--	54,600	94,500	10,700	--
Montmorency	107,000	16,600	--	--	133,000	49,500	--	--
Ogemaw	290,000	21,000	--	--	624,000	72,300	10,700	--
Oscoda	14,000	--	--	--	111,000	6,900	--	--
Otsego	120,000	7,100	--	--	95,000	36,000	--	175,000
Presque Isle	525,000	22,400	--	---	196,000	102,000	--	600,000
Roscommon	7,000	--	--	--	--	4,500	--	--
Other[a]	--	--	--	--	--	--	--	81,000
Northeast (3)	1,942,000	158,500	101,500	--	2,245,000	714,000	29,300	856,000
Lake	30,000	--	--	--	84,000	20,000	--	--
Mason	203,000	15,300	--	--	991,000	255,000	5,500	--
Muskegon	89,000	4,600	--	--	1,626,000	107,000	9,800	--
Newaygo	232,000	13,200	--	--	2,300,000	117,000	2,600	--
Oceana	55,000	5,600	--	--	684,000	140,000	2,100	--
West Central (4)	609,000	39,700	7,000	--	5,685,000	639,000	20,000	67,000
Clare	130,000	15,200	--	--	787,000	126,000	5,500	--
Gladwin	211,000	13,800	43700	--	1,093,000	216,000	52,000	--
Gratiot	800,000	4,500	728,000	8,000	10,823,000	1,138,000	2,099,000	132,000
Isabella	505,000	41,600	196,000	99,000	4,473,000	503,000	295,000	--
Mecosta	207,000	37,400	32,200	--	1,565,000	209,000	6,000	235,000
Midland	153,000	2,500	264,000	36,200	2,576,000	258,000	460,000	--
Montcalm	610,000	18,900	382,000	--	6,754,000	835,000	276,000	2,491,000
Osceola	312,000	18,300	--	--	628,000	73,000	5,500	--
Other[b]	--	--	--	--	--	--	--	127,000
Central (5)	2,928,000	152,200	1,649,500	144,200	28,699,000	3,358,000	3,199,000	2,985,000

TABLE XII-21. COUNTY ESTIMATES OF MAJOR FIELD CROP PRODUCTION IN MICHIGAN: 1982 (cont.)

	Crop							
County or district	Oats (bu)	Barley (bu)	Dry beans (cwt)	Sugarbeets[a] (tons)	Corn (bu)	Wheat (bu)	Soybeans (bu)	Potatoes (cwt)
Arenac	268,000	3,100	181,000	37,000	1,623,000	190,000	229,000	258,000
Bay	120,000	5,500	525,000	316,000	4,845,000	387,000	480,000	820,000
Huron	2,013,000	367,400	1,350,000	423,000	14,304,000	951,000	116,000	--
Saginaw	671,000	31,500	622,000	258,000	8,717,000	1,213,000	3,791,000	136,000
Sanilac	3,011,000	180,600	628,000	186,000	13,128,000	624,000	1,003,000	--
Tuscola	1,170,000	295,300	1,089,000	464,000	13,995,000	1,269,000	566,000	252,000
Other[b]	--	--	--	--	--	--	--	94,000
East Central (6)	7,253,000	833,400	4,395,000	1,684,000	56,612,000	4,634,000	6,185,000	1,560,000
Allegan	453,000	16,100	--	--	11,299,000	452,000	195,000	271,000
Berrien	115,000	4,400	2,300	--	5,308,000	308,000	663,000	--
Cass	185,000	11,300	--	--	8,311,000	412,000	683,000	--
Kalamazoo	325,000	4,400	1,200	--	6,354,000	820,000	693,000	--
Kent	472,000	11,500	19,000	--	7,174,000	387,000	574,000	163,000
Ottawa	494,000	3,000	--	--	6,803,000	249,000	270,000	95,000
Van Buren	148,000	9,900	--	--	5,191,000	180,000	229,000	69,200
Other[b]	--	--	--	--	--	--	--	64,800
Southwest (7)	2,192,000	60,600	28,000	--	50,363,000	2,808,000	3,293,000	663,000
Barry	295,000	10,900	23,400	--	4,947,000	506,000	238,000	161,000
Branch	384,000	2,500	--	--	12,413,000	813,000	1,311,000	--
Calhoun	600,000	4,600	3,200	--	11,865,000	975,0900	639,000	64,000
Clinton	832,000	21,500	152,000	--	8,268,000	936,000	1,597,000	--
Eaton	378,000	2,300	375,000	--	8,366,000	1,296,000	682,000	90,000
Hillsdale	547,000	--	--	--	11,606,000	550,000	1,074,000	--
Ingham	532,000	30,200	34,300	--	9,831,000	831,000	792,000	--
Ionia	759,000	29,000	235,000	--	8,978,000	1,097,000	692,000	--
Jackson	492,000	--	3,600	--	9,521,000	507,000	140,000	--
St. Joseph	201,000	4,500	1,800	--	10,673,000	569,000	1,059,000	--
Shiawassee	1,427,000	12,100	97,000	--	5,675,000	691,000	2,082,000	--
Other[b]	--	--	--	--	--	--	--	153,000
South Central (8)	6,447,000	119,600	926,000	5,100	102,143,000	8,771,000	10,306,000	468,000

TABLE XII-21. COUNTY ESTIMATES OF MAJOR FIELD CROP PRODUCTION IN MICHIGAN: 1982 (cont.)

	Crop							
County or district	Oats (bu)	Barley (bu)	Dry beans (cwt)	Sugarbeets[a] (tons)	Corn (bu)	Wheat (bu)	Soybeans (bu)	Potatoes (cwt)
Genesee	706,000	2,100	12,000	--	4,922,000	231,000	1,025,000	218,000
Lapeer	721,000	48,500	153,000	--	7,184,000	402,000	262,000	102,000
Lenawee	626,000	2,000	--	--	14,882,000	1,178,000	3,597,000	356,000
Livingston	303,000	--	3,200	--	5,696,000	250,000	88,000	--
Macomb	269,000	--	21,900	--	2,025,000	77,000	498,000	85,500
Monroe	414,000	7,000	--	--	7,955,000	247,000	2,751,000	392,000
Oakland	116,000	4,000	--	--	1,632,000	98,000	21,000	--
St. Clair	685,000	3,700	70,600	17,600	4,257,000	113,000	1,026,000	--
Washtenaw	921,000	13,000	--	--	8,423,000	665,000	462,000	181,000
Wayne	19,000	--	--	--	636,000	74,000	134,000	--
Other[b]	--	--	--	--	--	--	--	24,500
Southeast (9)	4,780,000	81,800	281,800	19,700	57,612,000	3,325,000	9,864,000	1,359,000
State	28,350,000	2,016,000	7,425,000	1,853,000	307,380,000	24,600,000	32,240,000	9,645,000

SOURCE: Michigan Department of Agriculture, Michigan Agricultural Statistics 1983.

a. Counties with less than 1,000 acres not published due to change in data collection methods.

b. For potatoes only, figure includes counties or districts where no data is given; for all of the other crops, it is not applicable.

TABLE XII-22. RANKING OF MICHIGAN COUNTIES ACCORDING TO LABOR AND PROPRIETORS' EARNINGS IN AGRICULTURE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

County	Percentage 1972	Percentage 1982	County	Percentage 1972	Percentage 1982
Missaukee	30.69	26.74	Saginaw	1.46	2.11
Sanilac	22.94	20.07	Shiawassee	5.78	1.99
Huron	22.22	19.46	Delta	2.22	1.74
Oceana	24.98	18.19	Cheboygan	1.87	1.72
Tuscola	13.20	14.41	Calhoun	1.85	1.63
Cass	10.89	13.60	Dickinson	1.06	1.55
Arenac	15.24	12.37	Charlevoix	2.21	1.46
Gratiot	13.68	11.64	Lenawee	7.30	1.43
Clinton	20.47	11.08	Grand Traverse	2.51	1.43
Oscoda	8.79	8.98	Kalkaska	3.87	1.40
Leelanau	16.78	8.83	Baraga	1.41	1.33
Ionia	12.78	8.51	Wexford	2.34	1.30
Gladwin	9.04	8.43	Houghton	1.25	1.26
Lapeer	12.58	8.25	Emmet	1.42	1.24
Allegan	11.35	8.16	Chippewa	1.26	1.23
Van Buren	8.20	7.90	Otsego	1.45	1.21
Montcalm	7.83	7.26	Monroe	4.85	1.18
Barry	7.84	7.12	Mackinac	1.89	1.16
Hillsdale	10.96	6.98	Kalamazoo	1.09	1.00
Newaygo	13.70	6.67	Midland	1.08	0.90
Eaton	7.63	5.94	Gogebic	1.06	0.84
Ogemaw	9.35	5.77	Schoolcraft	0.78	0.80
St. Joseph	4.88	5.73	St. Clair	2.75	0.77
Benzie	5.37	5.69	Ontonagon	0.82	0.73
Presque Isle	4.81	5.55	Luce	0.82	0.72
Menominee	7.12	5.45	Iosco	1.33	0.71
Lake	4.07	5.27	Jackson	1.46	0.69
Branch	7.62	5.20	Kent	0.85	0.61
Mecosta	9.02	5.06	Muskegon	0.77	0.59
Osceola	8.78	4.93	Alpena	1.37	0.54
Alcona	8.33	4.65	Washtenaw	1.09	0.52
Isabella	10.69	4.05	Ingham	0.72	0.46
Montmorency	5.11	3.94	Macomb	0.36	0.36
Mason	4.51	3.71	Marquette	0.13	0.23
Manistee	2.91	3.39	Roscommon	(D)	0.21
Bay	1.83	3.11	Genesee	0.33	0.13
Antrim	5.56	2.95	Oakland	0.13	0.10
Livingston	5.65	2.71	Wayne	0.02	0.04
Alger	2.50	2.51	Crawford	0.00	0.00
Ottawa	3.66	2.43	Keweenaw	0.00	0.00
Clare	5.77	2.22			
Iron	1.40	2.20	Michigan	1.35	1.05
Berrien	2.01	2.13	United States	3.02	1.83

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XII-23. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN AGRICULTURE: 1981-1982

	Percentage change			Percentage change	
County	1972-1982	1981-1982	County	1972-1982	1981-1982
Wayne	143	55	Kalkaska	119	-6
Oakland	90	49	Schoolcraft	141	-6
Luce	107	23	Arenac	80	-7
Macomb	99	13	Ogemaw	43	-7
Roscommon	(D)	13	Tuscola	132	-8
Clare	-15	12	Eaton	66	-8
Chippewa	36	12	Charlevoix	52	-8
Alcona	10	8	Ingham	54	-8
Lapeer	44	7	Kent	73	-9
Huron	79	7	Calhoun	68	-9
Alpena	-27	6	Montcalm	111	-9
Gogebic	41	5	Osceola	20	-9
Kalamazoo	126	4	Baraga	45	-10
Cass	142	4	Jackson	-10	-10
Ottawa	71	4	Sanilac	50	-11
Delta	81	3	Barry	80	-11
Muskegon	56	3	Ionia	39	-12
Presque Isle	137	3	Ontonagon	24	-14
Cheboygan	102	2	Washtenaw	24	-14
Iron	237	2	Gratiot	63	-14
Oscoda	86	2	Newaygo	-1	-15
Wexford	48	1	St. Joseph	144	-17
Mecosta	26	0	Mason	32	-17
Lake	84	0	Clinton	19	-19
Otsego	135	0	Manistee	136	-20
Montmorency	18	-1	Oceana	63	-20
Marquette	297	-1	Saginaw	179	-20
Iosco	-2	-1	Benzie	122	-20
Gladwin	102	-1	Grand Traverse	76	-24
Livingston	30	-3	Hillsdale	27	-27
Allegan	65	-3	Branch	42	-32
Bay	251	-3	St. Clair	-36	-33
Isabella	3	-3	Genesee	-22	-36
Mackinac	31	-3	Leelanau	-2	-45
Emmet	89	-3	Monroe	-43	-48
Houghton	129	-3	Antrim	7	-48
Alger	101	-3	Shiawassee	-38	-56
Van Buren	97	-4	Lenawee	-68	-62
Missaukee	95	-4	Crawford	(NA)	(NA)
Menominee	70	-4	Keweenaw	(NA)	(NA)
Dickinson	239	-5			
Midland	111	-5	Michigan	57	-11
Berrien	79	-6	United States	48	-16

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

(NA) Not available.

TABLE XII-24. MICHIGAN COUNTIES RANKED ACCORDING TO 1982 CASH RECEIPTS FROM TOTAL MARKETINGS: 1981 AND 1982

(Millions of dollars)

County	1981	1982	County	1981	1982
Huron	150	156	Menominee	20	20
Sanilac	120	124	Missaukee	19	20
Tuscola	121	123	Wayne	16	20
Saginaw	118	120	Mason	20	20
Allegan	111	114	Osceola	17	17
Ottawa	99	103	Antrim	14	13
Lenawee	96	100	Presque Isle	11	11
Gratiot	92	95	Gladwin	10	11
Kent	86	86	Ogemaw	10	10
Berrien	87	83	Delta	10	10
Van Buren	79	75	Clare	9	10
Clinton	69	72	Manistee	11	10
Lapeer	65	71	Alpena	9	9
Bay	69	71	Dickinson	8	8
Ionia	68	70	Benzie	7	6
Calhoun	64	68	Chippewa	6	6
Ingham	63	66	Charlevoix	6	6
Cass	63	66	Iosco	5	6
Monroe	60	64	Wexford	5	6
Hillsdale	61	63	Emmet	5	5
Montcalm	61	62	Cheboygan	4	5
Kalamazoo	56	61	Houghton	4	4
Washtenaw	57	60	Alcona	4	4
St. Joseph	57	60	Oscoda	3	3
Branch	54	57	Montmorency	3	3
Shiawassee	52	53	Otsego	3	3
Isabella	51	53	Marquette	3	3
Eaton	51	53	Iron	3	3
Jackson	47	50	Ontonagon	2	2
St. Clair	47	49	Mackinac	2	2
Macomb	38	43	Kalkaska	2	2
Barry	37	38	Alger	2	2
Genesee	35	37	Lake	2	2
Oceana	41	37	Gogebic	1	1
Newaygo	36	36	Baraga	1	1
Livingston	29	32	Schoolcraft	1	1
Mecosta	26	27	Luce	1	1
Oakland	22	27	Roscommon	0	0
Muskegon	27	26	Crawford	(NA)	(NA)
Midland	24	25	Keweenaw	(NA)	(NA)
Grand Traverse	25	21			
Leelanau	25	20	Michigan	2,920	3,007
Arenac	20	20	United States	149,881	152,131

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(NA) Keweenaw and Crawford counties have no cash receipts reported.

TABLE XII-25. MICHIGAN COUNTIES RANKED ACCORDING TO 1982 CASH RECEIPTS FROM CROPS MARKETINGS: 1981 AND 1982

(Millions of dollars)

County	1981	1982	County	1981	1982
Saginaw	100	101	Livingston	10	11
Tuscola	92	93	Mason	11	10
Huron	84	85	Manistee	10	9
Berrien	74	70	Antrim	10	8
Bay	64	66	Presque Isle	6	6
Gratiot	64	65	Benzie	6	5
Lenawee	57	57	Gladwin	5	5
Van Buren	60	54	Dickinson	5	5
Monroe	49	52	Menominee	4	4
Allegan	50	51	Missaukee	4	4
Ottawa	47	51	Delta	4	4
Sanilac	49	50	Osceola	3	3
Kent	51	50	Emmet	2	2
Montcalm	41	41	Clare	2	2
Lapeer	32	36	Cheboygan	2	2
Calhoun	33	34	Ogemaw	2	2
Kalamazoo	30	33	Alpena	2	2
Eaton	32	33	Iron	2	2
Macomb	28	32	Wexford	2	2
St. Joseph	31	32	Houghton	2	2
Ionia	32	31	Marquette	2	2
Ingham	30	31	Iosco	2	2
Branch	29	30	Kalkaska	1	2
Oceana	34	29	Chippewa	1	1
Clinton	28	28	Charlevoix	1	1
Shiawassee	28	28	Otsego	1	1
Hillsdale	28	28	Alcona	1	1
Washtenaw	26	27	Montmorency	1	1
Cass	25	25	Ontonagon	1	1
St. Clair	20	21	Lake	1	1
Jackson	20	21	Luce	0	1
Oakland	16	19	Schoolcraft	0	0
Newaygo	19	19	Alger	0	0
Wayne	15	19	Mackinac	0	0
Midland	18	18	Oscoda	0	0
Isabella	18	18	Roscommon	0	0
Genesee	17	17	Baraga	0	0
Grand Traverse	21	17	Gogebic	0	0
Muskegon	17	16	Crawford	(NA)	(NA)
Leelanau	21	16	Keweenaw	(NA)	(NA)
Barry	15	15			
Arenac	11	12	Michigan	1,676	1,688
Mecosta	11	11	United States	73,062	74,343

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(NA) Keweenaw and Crawford counties have no cash receipts reported.

TABLE XII-26. MICHIGAN COUNTIES RANKED ACCORDING TO 1982 CASH RECEIPTS FROM LIVESTOCK AND LIVESTOCK PRODUCTS MARKETINGS: 1981 AND 1982

(Millions of dollars)

County	1981	1982	County	1981	1982
Sanilac	71	74	Clare	7	8
Huron	66	71	Oakland	7	7
Allegan	60	63	Alpena	7	7
Ottawa	51	52	Delta	6	6
Clinton	41	44	Midland	6	6
Lenawee	40	43	Gladwin	6	6
Cass	37	40	Presque Isle	5	5
Ionia	37	39	Bay	5	5
Kent	35	37	Antrim	5	5
Lapeer	34	36	Leelanau	4	5
Ingham	33	35	Chippewa	5	5
Isabella	33	35	Charlevoix	4	5
Hillsdale	33	35	Iosco	4	4
Calhoun	31	34	Wexford	4	4
Washtenaw	30	32	Grand Traverse	3	4
Tuscola	29	30	Oscoda	3	3
Jackson	27	29	Emmet	3	3
Gratiot	27	29	Alcona	3	3
St. Clair	27	28	Dickinson	3	3
St. Joseph	26	28	Houghton	3	3
Kalamazoo	25	27	Montmorency	3	3
Branch	25	27	Cheboygan	2	2
Shiawassee	24	25	Mackinac	2	2
Barry	22	23	Ontonagon	2	2
Van Buren	19	21	Alger	2	2
Montcalm	20	21	Otsego	2	2
Livingston	19	21	Wayne	1	1
Eaton	19	20	Benzie	1	1
Genesee	18	20	Manistee	1	1
Saginaw	18	19	Lake	1	1
Newaygo	17	18	Gogebic	1	1
Missaukee	16	16	Marquette	1	1
Menominee	16	16	Baraga	1	1
Mecosta	15	16	Iron	1	1
Osceola	14	15	Kalkaska	1	1
Berrien	12	13	Schoolcraft	0	0
Monroe	11	12	Luce	0	0
Muskegon	10	11	Roscommon	0	0
Macomb	10	11	Crawford	(NA)	(NA)
Mason	9	9	Keweenaw	(NA)	(NA)
Arenac	8	9			
Ogemaw	8	8	Michigan	1,244	1,319
Oceana	8	8	United States	76,819	77,788

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(NA) Keweenaw and Crawford counties have no cash receipts reported.

TABLE XII-21. COUNTY ESTIMATES OF MAJOR FIELD CROP PRODUCTION IN MICHIGAN: 1982

	Crop							
County or district	Oats (bu)	Barley (bu)	Dry beans (cwt)	Sugarbeets[a] (tons)	Corn (bu)	Wheat (bu)	Soybeans (bu)	Potatoes (cwt)
Alger	20,000	29,300	--	--	9,400	--	--	--
Baraga	21,000	12,500	--	--	--	3,700	--	--
Chippewa	324,000	18,800	--	--	--	19,900	--	--
Delta	228,000	111,400	--	--	102,600	4,900	8,300	220,000
Dickinson	54,000	18,500	--	--	40,000	--	--	354,000
Gogebic	8,000	--	--	--	--	--	--	--
Houghton	94,000	7,100	--	--	22,000	--	--	106,000
Iron	77,000	6,300	--	--	--	6,900	--	89,000
Keweenaw	--	--	--	--	--	--	--	--
Luce	14,000	6,400	--	--	--	--	--	93,000
Mackinac	90,000	26,100	--	--	29,000	6,800	--	--
Marquette	39,000	24,400	--	--	8,500	--	--	85,000
Menominee	304,000	160,000	--	--	931,000	13,600	2,600	--
Ontonagon	87,000	6,300	--	--	--	3,100	--	--
Schoolcraft	27,000	28,700	--	--	--	3,000	1,600	58,000
Other[b]	--	--	--	--	--	--	--	12,000
Upper Peninsula (1)	1,387,000	456,300	16,200	--	1,171,000	62,500	13,500	1,017,000
Antrim	48,000	4,400	--	--	302,000	46,200	--	230,000
Benzie	4,000	--	--	--	42,000	1,600	--	--
Charlevoix	42,000	23,100	--	--	167,000	10,200	--	--
Emmet	101,000	10,400	--	--	116,000	6,700	--	106,000
Grand Traverse	84,000	6,900	--	--	634,000	59,600	2,200	--
Kalkaska	18,000	--	--	--	181,000	30,800	3,000	173,000
Leelanau	50,000	2,500	--	--	210,000	14,700	--	--
Manistee	29,000	4,100	--	--	172,000	21,700	7,600	76,000
Missaukee	373,000	8,800	--	--	685,000	47,500	--	--
Wexford	63,000	3,200	--	--	341,000	49,500	1,400	--
Other[b]	--	--	--	--	--	--	--	85,000
Northwest (2)	812,000	63,900	20,000	--	2,850,000	288,500	16,200	670,000

TABLE XII-27. PULPWOOD PRODUCTION IN MICHIGAN'S UPPER AND LOWER PENINSULAS, BY SPECIES: 1981 AND 1982

Species[a]	1981 Upper peninsula	1981 Lower peninsula	1981 State total	1982 Upper peninsula	1982 Lower peninsula	1982 State total
Aspen	2,908	3,614	6,522	2,429	3,284	5,713
Balsam fir	989	50	1,039	1,009	39	1,048
Birch	797	256	1,053	687	203	890
Maple	1,545	840	2,385	1,081	619	1,700
Oak	76	1,055	1,131	34	828	862
Other hardwoods	1,002	211	1,213	1,206	196	1,402
Cedar	113	0	113	117	0	117
Hemlock	385	3	388	556	0	556
Pine	1,010	1,358	2,368	1,288	1,335	2,623
Spruce	433	15	448	676	8	684
Tamarack	58	0	58	98	0	98
TOTAL ROUNDWOOD	9,316	7,402	16,718	9,180	6,513	15,693
Residues[b] used as pulpwood:						
Softwood	n.a.	n.a.	146	n.a.	n.a.	134
Hardwood	n.a.	n.a.	1,515	n.a.	n.a.	1,075
Total residues	n.a.	n.a.	1,661	n.a.	n.a.	1,204
TOTAL ALL PULPWOOD	n.a.	n.a.	18,379	n.a.	n.a.	16,902

SOURCE: Michigan Department of Natural Resources, special release, and Forest Service of the United States, Department of Agriculture, special release.

a. Wood received by companies which manufacture paper, paperboard, hardboard, insulation board, and particleboard.

b. Includes slabs, edgings, veneer cores, and chips.

n.a.: Data not available.

XIII. MINING

Each establishment is classified on the basis of its major economic activity. Those primarily engaged in mining are tabulated in the Census of Mineral Industries, where they are further classified on the basis of the principal mineral produced or, if there is no production, on the basis of the principal mineral for which exploration or development is in progress. Mineral processing, not in conjunction with extraction, is classified in manufacturing. A major difference between census statistics and those published by the U.S. Bureau of Mines and the Geological Survey Division of the Michigan Department of Natural Resources is the exclusion of cement manufacturing in the former and its inclusion in the latter. Another difference stems from the treatment of government-owned operations, such as gravel pits mined by county road crews. Census statistics would exclude those establishments whereas the Bureau of Mines and the Geological Survey Division would not. For the most part, the Geological Survey Division and the Bureau of Mines are interested in reporting mineral production, irrespective of mine ownership. Census statistics focus on the economic nature of establishments.

Companies with operations at more than one location must report separately for each establishment; all resulting tabulations are initially based on these reports. Establishments not engaged in mineral extraction are classified in another industry. For example, the Michigan oil wells of an integrated petroleum company would be reported as a mineral establishment, but the refinery would be a manufacturing establishment, and company-operated retail or wholesale outlets for petroleum products would be classified in retail or wholesale trade. A mining establishment generally represents a unit operation even though there may be several pits, shafts, or wells. The operations of natural gas plants are included in mining inasmuch as these engage in separating hydrocarbons for use or further processing elsewhere. Establishments without paid employees and with shipments or expenditures totaling less than $500 were included.

The Bureau of Mines, U.S. Department of Interior, annually publishes Mineral Yearbook. A chapter entitled "The Mineral Industry of Michigan" is prepared in cooperation with the Geological Survey Division, Michigan Department of Natural Resources. The Geological Survey Division issues occasional releases dealing with Michigan's mineral industries. It also publishes Michigan's Oil and Gas Fields and a directory, Michigan Mineral Producers.

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TABLE XIII-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF PRODUCTION WORKERS IN MICHIGAN AND THE UNITED STATES MINING ESTABLISHMENTS: 1960-1983

	MICHIGAN							United States[a]						
		Weekly							Weekly					
	Employment	Hours		Earnings		Hourly Earnings		Employment	Hours		Earnings		Hourly Earnings	
Year	ment (000)	Metallic	Nonmetallic	Metallic	Nonmetallic	Metallic	Nomentallic	ment (000)	Metallic	Nonmetallic	Metallic	Nonmetallic	Metallic	Nonmetallic
1960	15.5	40.3	41.6	116.27	111.24	2.89	2.67	712	41.8	43.7	111.19	96.58	2.66	2.21
1961	13.4	40.4	49.7	115.62	139.21	2.86	2.80	672	41.4	43.9	113.44	100.09	2.74	2.28
1962	13.1	40.6	56.9	118.23	164.95	2.91	2.90	650	41.5	44.3	117.45	105.43	2.83	2.38
1963	12.9	44.1	53.1	128.11	160.04	2.91	3.01	635	41.2	44.6	118.66	108.38	2.88	2.43
1964	13.0	42.3	44.8	129.65	133.77	3.07	2.99	634	41.4	45.1	122.54	111.85	2.96	2.48
1965	13.4	41.3	45.4	130.30	139.70	3.16	3.08	632	41.6	45.7	127.30	117.45	3.06	2.57
1966	13.5	43.2	45.5	137.68	140.31	3.19	3.08	627	42.2	45.7	133.77	123.39	3.17	2.70
1967	12.8	45.1	46.9	146.08	126.54	3.24	2.70	613	42.1	45.2	136.40	128.82	3.24	2.85
1968	12.6	42.2	44.5	145.29	129.14	3.44	2.90	606	43.3	44.9	148.09	136.50	3.42	3.04
1969	12.2	43.7	44.6	162.52	161.05	3.72	3.61	619	43.1	45.6	156.88	149.11	3.64	3.27
1970	11.8	43.6	44.1	166.99	167.84	3.83	3.81	623	43.1	44.7	167.23	155.11	3.88	3.47
1971	11.1	42.5	44.5	173.91	184.94	4.09	4.16	609	42.8	44.9	176.34	166.13	4.12	3.70
1972	12.0	43.1	40.9	197.21	186.80	4.58	4.56	628	41.4	44.7	188.78	176.57	4.56	3.95
1973	12.9	42.6	44.0	208.83	216.70	4.90	4.93	642	41.7	45.5	201.83	192.01	4.84	4.22
1974	13.4	43.7	43.7	244.55	235.93	5.60	5.38	697	41.4	45.0	225.22	202.50	5.44	4.50
1975	13.8	40.2	42.5	268.74	275.06	6.69	6.47	752	40.7	43.5	249.49	215.33	6.13	4.95
1976	13.2	42.4	44.2	288.75	286.02	6.82	6.46	779	41.0	44.2	277.16	236.91	6.76	5.36
1977	12.1	42.2	43.3	307.51	300.37	7.29	6.94	813	40.8	44.6	297.02	259.13	7.28	5.81
1978	13.3	41.8	44.3	351.71	344.30	8.41	7.77	851	41.3	44.8	339.90	283.58	8.23	6.33
1979	13.2	41.9	43.0	394.36	370.06	9.41	8.61	958	41.2	45.0	381.92	310.50	9.27	6.90
1980	12.5	40.8	42.2	430.80	389.63	10.56	9.23	1,027	40.5	43.6	415.53	327.87	10.26	7.52
1981	12.1	40.0	44.4	451.11	437.92	11.29	9.87	1,104	40.5	43.0	468.59	356.04	11.57	8.28
1982	10.4	b	41.4	b	447.51	12.88	10.80	1,121	38.6	42.6	475.17	379.99	12.31	8.92
1983	8.7	b	41.0	b	436.57	12.20	10.64	1,021	39.6	43.6	501.73	403.30	12.67	9.25

SOURCE: Michigan Employment Security Commission special release, and Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C.: Monthly).

a. Nonmetallic figures for the U.S. does not include "Fuel."

b. Data not available due to disclosure factors.

TABLE XIII-2. SELECTED DATA FOR MINERAL INDUSTRIES IN MICHIGAN AND THE UNITED STATES: 1954, 1958, 1963, 1967, 1972, AND 1977

Year	Establishments Total (Number)		All employees[a] Number (0,000)		All employees[a] Payroll ($1,000,000)		Value added in Mining ($1,000,000)	
	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.
1954	567	37,641	16.4	787.1	76.3	3,394.8	149.1	11,558.7[d]
1958	539	36,392	14.3	733.9	73.2	3,749.0	158.0	13,385.2
1963	691[b]	38,651[c]	12.2	615.6	75.2	3,742.5	223.1	15,910.0
1967	459[b]	28,579[c]	12.2	567.3	88.0	4,186.8	289.9	19,330.2
1972	409[b]	25,269[c]	11.4	595.1	119.9	6,225.5	306.3	26,470.6
1977	499[b]	31,359[c]	11.3	798.8	203.3	13,166.8	938.9	68,013.1

SOURCE: Bureau of the Census, 1977 Census of Mineral Industries, Geographic Area Series (Washington, D.C.: March 1981), MIC77-A-3, Table 1 and general summary.

a. For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, the number of production, development, and exploration workers was estimated from reported figures for hours worked. No data was obtained on other employees at such operations; hence, the same employment and payroll figures are included for all employees as for production, development, and exploration workers.

b. In 1977, 1972, and 1967 data for companies without paid employees were excluded from the census of mineral industries. In 1963, there were 854 single-unit establishments without paid employees in the states covered by this report. In the 1963 census, establishments without paid employees for mining as a whole accounted for approximately 3 percent of value added.

c. In 1977, 1972, and 1967, data for single-unit establishments without paid employees were excluded from the census. In 1963, there were 6,543 single-unit establishments without paid employees in the States. In the 1963 census, establishments without paid employees for mining as a whole accounted for approximately 3 percent of value added.

d. Excludes data for uranium-radium-vanadium ores industry.

TABLE XIII-3. VALUE OF MICHIGAN FUEL AND METALLIC AND NONMETALLIC MINERAL PRODUCTION: 1950-1982

(In thousands of dollars)

Year	Fuel	Metallic	Nonmetallic[a]	Total
1950	45,475	84,212	108,787	238,474
1951	40,279	90,279	127,052	257,530
1952	38,093	94,763	134,234	267,089
1953	37,333	105,236	145,125	287,693
1954	35,667	82,525	168,375	286,550
1955	33,623	145,380	192,354	371,357
1956	32,538	157,219	216,806	406,563
1957	31,785	144,235	230,790	406,810
1958	29,701	102,119	217,703	349,523
1959	33,719	97,363	254,240	385,322
1960	50,629	134,098	250,402	435,130
1961	62,144	125,956	255,164	443,263
1962	58,127	124,431	255,131	437,689
1963	58,099	155,277	272,208	485,583
1964	55,656	188,979	300,377	545,011
1965	54,685	204,241	30,875	526,801
1966	54,606	211,355	323,628	589,589
1967	53,371	207,975	334,104	595,449
1968	56,600	213,930	347,476	612,826
1969	55,580	248,945	354,904	659,445
1970	51,326	249,332	383,460	684,118
1971	49,292	226,325	380,166	655,783
1972	57,847	233,331	407,333	698,511
1973	80,194	276,526	460,230	816,950
1974	190,134	369,225	497,942	1,057,301
1975	327,456	425,201	492,695	1,245,352
1976	435,234	487,172	560,838	1,483,244
1977	506,965	414,390	640,506	1,561,861
1978	594,802	609,908	753,101	1,957,811
1979	803,378	697,342	823,159	2,323,879
1980	1,101,463	735,937	832,471	2,669,871
1981[p]	1,429,372	767,040	732,372	2,928,784
1982[p]	1,496,871	348,926	629,310	2,475,107

SOURCE: Michigan Department of Natural Resources, special release; and United States Department of Interior, Bureau of Mines, special release.

a. Includes cement, classified in manufacturing by the U.S. Bureau of the Census.

p: Preliminary.

TABLE XIII-4. VALUE OF MICHIGAN MINERAL PRODUCTION, BY PRODUCT: 1976-1982

(In thousands of dollars)

Mineral	1976	1977	1978	1979	1980	1981	1982[p]
Iron ore	427,339	357,565	576,359	613,174	652,599	687,057	313,000
Cement	138,357	153,751	176,701	225,519	268,513	191,225	155,400
Petroleum	329,637	360,995	427,881	524,257	664,000	992,435	1,036,277
Sand & gravel	78,372	97,503	108,832	116,597	98,700	95,787[h]	72,400
Nat. salines[a]	124,122	138,712	169,474	185,218	182,347	193,635	195,063
Copper	59,113	59,115	49,071	79,195	75,733	79,982	35,926
Salt	79,740	78,864	83,263	82,540	76,875	103,293	86,901
Stone[b]	63,517	66,331	96,789	99,998	85,568	94,453	70,910
Lime	39,686	42,015	45,814	43,373	37,603	36,800	32,559
Nat. gas	106,739	145,970	166,921	279,121	386,000	436,937	460,594
Gypsum (crude)[c]	8,760	10,769	18,996	14,633	13,573	6,762	6,913
Clay & shale[d]	4,741	5,126	6,993	7,430	6,495	5,862	4,005
Nat. gas liquids[e]	(f)	(f)	(f)	(f)	(f)	(f)	(f)
Peat	3,714	4,754	3,843	4,847	5,473	4,540	5,144
Silver	1,223	1,987	1,836	4,973	2,795	(i)	(i)
Marl	156	63	59	n.a.	n.a.	(j)	(j)
Miscellaneous	936	856	1,060	10	10	n.a.	n.a.
TOTAL	1,483,244	1,537,621	1,982,710	2,323,879	2,530,711	2,928,784	2,475,107

SOURCE: Michigan Department of Natural Resources, Michigan Mineral Producers (Lansing: annually), and special release.

NOTE: 1977 and 1978 totals adjusted to avoid double counting: stone used in the manufacture of cement and lime in Michigan; sandstone crushed to manufacture industrial sand; shale, clay, gypsum, and sand used in cement manufacturing in Michigan; sand and gravel; sand and gravel includes industrial sand; 1979 and 1980 stone includes marl.

a. Bromine, magnesium compounds, calcium-magnesium chloride, potash, and iodine.
b. Does not include limestone and dolomite used in the manufacture of cement and lime (1976 only that used within Michigan has been deducted).
c. 1976 value of gypsum used in Michigan to manufacture cement has been deducted.
d. Title brick, pottery, clay used for cement, lightweight aggregate, and miscellaneous. (1976 value used in Michigan for cement has been deducted).
e. Includes liquids stripped from gas delivered via interstate pipeline.
f. Included in petroleum and natural gas according to Proration Unit.
g. Included in miscellaneous.
h. Estimated
i. Included in copper.
j. Included in stone.
p. Preliminary
n.a.: not available.

TABLE XIII-5. QUANTITY OF SELECTED MINERALS AND FUELS PRODUCED IN MICHIGAN: 1977-1983

Commodity	Units of measure	1977	1978	1979	1980	1981	1982	1983[p]
Metallic								
Copper	1,000 short tons	42	38	44	36	43	32[p]	n.a.
Iron	1,000 long tons	12,009	17,538	17,081	16,267	15,602	6,700[p]	n.a.
Silver	1,000 troy ounces	335	354	475	(C)	(C)	(C)	n.a.
Nonmetallic								
Cement	1,000 short tons	5,828	6,210	5,944	4,972	4,044	3,390	4,085
Clay and shale	1,000 short tons	2,007	2,122	2,072	1,982	1,610	1,022	1,530
Gypsum	1,000 short tons	1,924	2,765	2,562	1,383	1,066	682	790
Lime	1,000 short tons	1,347	1,291	1,057	836	807	571	583
Natural salines[b]	1,000 short tons	1,267	1,365	n.a.	n.a.	1,183	1,038[p]	n.a.
Peat	1,000 short tons	226	220	258	253	237	241	186
Salt	1,000 short tons	3,939	3,741	3,080	2,406	2,321	2,002	1,331
Sand and gravel	1,000 short tons	46,486	48,260	50,169	36,597	32,893	23,487	26,500
Stone[a]	1,000 short tons	40,525	40,688	39,818	32,100	30,019	20,704[p]	25,004
Fuels								
Petroleum	1,000 barrels	32,965	34,667	34,862	33,808	32,664	31,596[p]	n.a.
Natural gas	1,000 thousand cubic feet	133,215	150,535	150,731	158,302	152,593	143,319[p]	n.a.

SOURCE: Michigan Department of Natural Resources, special release.

a. Includes marl.
b. Includes bromine, iodine, calcium-magnesium chloride, and magnesium compounds.
c. Included in copper.
p. Preliminary data
n.a.: Data not available.

TABLE XIII-6. NUMBER OF ACTIVE MINES, SHIPMENTS, AND AVERAGE NUMBER OF MEN EMPLOYED IN IRON ORE MINING IN MICHIGAN: 1957-1983

Year	Number of active mines	Shipments by range (thousands of long tons) Marquette	Menominee	Gogebic	Employment
1957	36	5,993	4,297	2,837	6,311
1958	32	3,722	3,095	1,394	4,912
1959	27	3,530	2,478	1,251	4,163
1960	27	4,945	4,121	1,890	4,723
1961	24	4,183	3,886	1,362	3,466
1962	21	4,500	3,462	1,480	2,857
1963	19	5,850	4,304	813	3,586
1964	16	7,945	4,624	1,403	3,912
1965	16	8,925	4,361	773	3,775
1966	15	9,660	4,328	364	3,690
1967	12	10,165	3,630	239[a]	3,430
1968	11	9,367	3,449	0	3,090
1969	11	11,163	3,390	0	3,061
1970	7	10,336	2,925	0	2,798
1971	7	9,331	2,834	0	2,425
1972	6	9,251	2,577	0	2,226
1973	6	9,941	2,374	0	2,322
1974	6	9,009	2,522	0	2,548
1975	6	12,143	2,235	0	2,949
1976	6	13,362	2,326	0	3,075
1977	6	9,683	2,332	0	3,344
1978	6	15,934	2,252[b]	0	3,294
1979	5	14,993[c]	2,358	0	3,083
1980	4	13,868	1,866	0	2,822
1981	4	15,183	182	0	2,153
1982	2	6,927[d]	100[e]	0	1,766
1983	2	10,148	0	0	1,433

SOURCE: Michigan Department of Natural Resources, Geological Survey Division, special release.

a. Peterson mine permanently closed January 1967. Stockpile shipments completed in 1967.
b. Sherwood mine closed July 1978, shipments continued through 1979.
c. Mather mine closed July 1979, shipments continued through 1979.
d. Republic mine closed in 1982. Only the Empire and Tilden mines now operating.
e. Groveland mine closed in 1982.

TABLE XIII-7. PRODUCTION AND SHIPMENTS OF PORTLAND AND MASONRY CEMENT FROM MICHIGAN MILLS: 1957-1983

Year	Number of plants	Production (barrels)	Shipment (barrels)	Value of shipments
1957	8	21,015,000	22,045,034	71,605,137
1958	8	19,841,000	20,911,990	70,432,501
1959	8	21,561,000	23,025,928	77,323,974
1960	9	20,971,000	22,351,498	77,694,087
1961	9	21,661,000	23,462,554	79,638,973
1962	9	23,070,000	24,198,903	77,601,954
1963	9	24,194,000	26,694,665	81,446,667
1964	9	26,802,000	28,133,856	89,270,172
1965	8	27,018,000	29,135,052	92,369,052
1966	8	28,848,000	29,683,903	92,634,187
1967	9	31,350,682	31,131,016	90,810,328
1968	9	32,779,308	32,868,574	104,684,405
1969	9	31,982,736	31,790,616	103,897,422
1970	9	31,982,091	32,318,659	110,513,273
1971	9	33,723,094	33,750,455	109,833,119
1972	9	32,717,784	32,719,919	117,368,094
1973	9	33,781,604	34,515,369	129,627,462
1974	8	n.a.	32,552,275	146,822,510
1975	8	n.a.	25,581,964	138,356,710
1976	8	28,358,195	27,388,260	153,751,000
1977	8	5,815,974[a]	5,796,698[a]	175,458,343
1978	7	6,210,009[a]	6,189,337[a]	225,402,230
1979	7	6,053,375[a]	5,944,109[a]	268,502,624
1980	7	4,972,330[a]	4,856,465[a]	238,977,675
1981	6	4,112,381[a]	4,044,292[a]	191,224,916
1982	6	3,433,127[a]	3,389,819[a]	158,285,026
1983[p]	n.a.	n.a.	4,085,000[a]	195,080,000

SOURCE: Michigan Department of Natural Resources, special release.

NOTE: one barrel = 376 pounds or 0.188 short tons.

a. Short tons.

p: Preliminary.

e: Estimated.

n.a.: not available.

TABLE XIII-8. COPPER PRODUCTION IN MICHIGAN, BY COUNTY: 1957-1983

(In pounds)

Year	Houghton	Keweenaw	Ontonagon	Total
1957	21,781,882	22,843,409	69,021,852	113,647,143
1958	16,345,030	23,886,930	81,827,063	122,059,023
1959	20,689,233	22,730,365	69,661,935	113,081,533
1960	21,704,276	18,592,215	75,142,046	115,438,537
1961	20,175,410	18,337,000	103,756,178	142,268,588
1962	24,072,160	13,075,067	106,613,451	143,760,678
1963	22,879,603	13,000,730	113,900,191	149,780,524
1964	19,818,237	9,507,806	108,458,751	137,784,794
1965	15,759,103	6,414,944	123,743,392	145,917,439
1966	17,433,796	8,128,529	121,181,717	146,744,040
1967	16,695,626	7,763,357	92,731,257	117,190,240
1968	6,592,118	4,696,188	137,092,516	148,380,322
1969	0	0	149,952,283	149,952,283
1970	0	0	135,086,800	135,086,800
1971	0	0	112,155,147	112,155,147
1972	0	0	131,937,378	131,937,378
1973	0	0	151,678,939	151,678,939
1974	0	0	131,037,602	131,037,602
1975	1,455,657	0	140,819,850	142,275,507
1976	3,886,218	0	83,044,081	86,930,299
1977	0	0	85,960,551	85,960,551
1978	0	0	78,301,136	78,301,136
1979	0	0	87,469,886	87,469,886
1980	0	0	71,540,437	71,540,437
1981	0	0	86,723,895	86,723,895
1982	0	0	45,202,832	45,202,832
1983	0	0	2,111,876	2,111,876

SOURCE: Michigan Department of Natural Resources, special release, and special release from private sources.

TABLE XIII-9. MICHIGAN CRUSHED STONE SOLD OR USED BY PRODUCERS, BY USE: 1980-1981

(Thousand short tons and thousand dollars)

Use	1980		1981	
	Quantity	Value	Quantity	Value
Agricultural limestone	221	773	248	948
Agricultural marl and other soil conditioners	27	54	43	112
Concrete aggregate (coarse)	3,223	7,761	2,705	7,337
Bituminous aggregate	1,732	5,355	1,494	5,112
Macadam aggregate	372	1,008	359	866
Dense-graded road base stone	1,044	3,279	1,047	3,393
Surface treatment aggregate	162	482	82	287
Other construction aggregate and road stone	1,817	5,753	1,469	4,851
Riprap and jetty stone	443	1,168	297	1,006
Railroad ballast	W	W	378	1,081
Manufactured fine aggregate (stone sand)	W	W	13	39
Cement manufacture	6,589	14,455	6,357	14,251
Lime manufacture	7,698	22,580	8,450	28,166
Flux stone	7,702	25,909	6,537	25,055
Other[a]	1,090	3,150	532	1,819
TOTAL[b]	32,121	91,727	30,013	94,324

SOURCE: U.S. Bureau of Mines, Minerals Yearbook, 1981.

NOTE: Crushed stone includes limestone, marl, traprock, and miscellaneous stone.

a. Includes stone used for poultry grit and mineral food, terrazzo and exposed aggregate, chemical stone for alkali works, paper manufacture, sugar refining, waste material, and other uses not specified.

b. Data may not add to totals shown because of independent rounding.

W: Withheld to avoid disclosing company proprietary data; included with "Other."

TABLE XIII-10. INDUSTRIAL SAND AND GRAVEL SOLD OR USED, BY PRODUCER AND USE: 1980 AND 1981

(In thousands of short tons and thousands of dollars)

Use	1980			1981		
	Quantity	Value	Value per ton	Quantity	Value	Value per ton
Construction:						
Sand	13,336	$ 27,872	$ 2.09	n.a.	n.a.	n.a.
Gravel	19,200	45,924	2.36	n.a.	n.a.	n.a.
TOTAL[a] or average	32,536	73,166	2.25	28,500[b]	$ 66,000[b]	$ 2.32[b]
Industrial:						
Sand	4,062	25,188	6.20	4,393	29,787	6.78
Gravel	--	--	--	--	--	--
TOTAL	4,062	25,188	6.20	4,393	29,787	6.78
GRAND TOTAL[a] or average	36,597	98,354	2.69	32,893[b]	95,787[b]	2.91[b]

SOURCE: U.S. Bureau of Mines. Minerals Yearbook, 1981.

a. Totals may not add due to rounding.
b. Preliminary.

TABLE XIII-11. CRUSHED STONE SOLD OR USED BY MICHIGAN PRODUCERS, BY USE: 1980 AND 1981

Use	1980		1981	
	Quantity (1,000) short tons	Value ($1,000)	Quantity (1,000) short tons	Value ($1,000)
Agricultural limestone[a]	221	$ 773	248	$ 948
Agricultural marl and other soil conditioners	27	54	43	112
Concrete aggregate (coarse)	3,223	7,761	2,705	7,337
Bituminous aggregate	1,732	5,355	1,494	5,112
Macadam aggregate	372	1,008	359	866
Dense-graded roadbase stone	1,044	3,279	1,047	3,393
Surface treatment aggregate	162	482	82	287
Other construction aggregate and roadstone	1,817	5,753	1,469	4,851
Riprap and jetty stone	443	1,168	297	1,006
Railroad ballast	W	W	378	1,081
Terrazzo and exposed aggregate	W	W	13	39
Cement manufacture	6,589	14,455	6,357	14,251
Lime manufacture	7,698	22,580	8,450	28,166
Flux stone	7,702	25,909	6,537	25,055
Other uses[b]	1,090	3,150	532	1,819
TOTAL[c]	32,121	91,727	30,013	94,324

SOURCE: U.S. Bureau of Mines, Minerals Yearbook, 1981.

W: Withheld to avoid disclosing company propietary data; included with "other uses."

a. Includes limestone, granite (1979), marl, sandstone, and traprock.

b. Includes stone used for poultry grit and mineral food, manufactured fine aggregate (stone sand), chemical stone, asphalt filler (1979), paper manufacture, sugar refining, and waste material.

c. Data may not add to totals shown because of independent rounding.

TABLE XIII-12. PERMITS TO DRILL, AND OIL AND GAS WELL COMPLETIONS IN MICHIGAN: 1955-1982

Year	Permits issued	Classification of well completions					
		Oil wells	Gas wells	Service wells		Dry holes	Total completions
				OBS-GS[a]	BDW-LPG[b]		
1955	484	204	13	1	1	291	510
1956	476	196	12	28	0	227	463
1957	461	176	40	35	3	207	461
1958	481	166	20	36	4	227	453
1959	727	257	47	72	4	272	652
1960	904	372	19	79	1	441	912
1961	849	207	57	74	3	376	817
1962	711	148	62	53	4	474	741
1963	704	135	72	56	2	384	650
1964	583	82	48	126[c]	0	376	632
1965	494	53	34	106	0	291	485
1966	430	56	45	11	2	290	404
1967	405	69	38	26	0	287	420
1968	378	70	12	30[d]	6	251	369
1969	379	73	9	26	0	239	347
1970	425	50	16	108	3	211	388
1971	425	83	31	83	13	186	396
1972	423	84	38	64	2	186	374
1973	445	81	47	67	0	173	369
1974	503	134	61	54	2	235	484
1975	653	167	40	38	0	330	571
1976	645	120	57	50	0	333	560
1977	692	136	70	49	1	341	597
1978	690	146	57	74	0	325	602
1979	649	173	58	68	0	290	589
1980	856	208	51	57	0	416	732
1981	1,048	252	43	34	0	450	779
1982	1,052	370	57	34	0	505	966

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1955 through 1982) (Lansing: annually); and special release.

a. OBS-GS: wells used for gas storage or observation.

b. LPG injection and extraction wells in liquified petroleum gas storage facilities and brine disposal wells.

c. Includes three brine disposal wells, one water injection well, and one geological information test.

d. Includes two water injection wells and one brine disposal well.

TABLE XIII-13. OIL AND GAS WELL COMPLETIONS IN MICHIGAN, AND FOOTAGE DRILLED, BY COUNTY: 1981 AND 1982

County	1981				1982			
	Total well footage				Total well footage			
	Exploratory	Developmental	Average well depth	Total wells drilled	Exploratory	Developmental	Average well depth	Total wells drilled
Alcona	10,402	0	10,402	1	--	--	--	--
Allegan	12,120	13,804	1,852	14	7,249	33,975	2,945	14
Antrim	10,218	0	5,109	2	28,279	0	5,655	5
Arenac	30,505	0	4,358	7	15,700	17,633	4,762	7
Barry	10,358	0	3,453	3	3,440	0	3,440	1
Bay	19,865	56,177	2,963	27	6,843	69,638	2,467	31
Benzie	5,851	5,790	5,821	2	0	11,596	5,798	2
Berrien	0	0	11	0	0	4,045	809	5
Branch	4,500	0	4,500	1	0	0	0	0
Calhoun	151,880	63,964	3,040	71	168,154	56,209	3,162	72
Cass	23,751	7,882	1,503	21	18,924	19,885	1,034	39
Charlevoix	8,902	0	8,902	1	0	0	0	0
Cheboygan	26,936	0	3,848	7	12,221	6,821	2,720	7
Chippewa	4,727	0	1,182	4	--	--	--	--
Clare	30,486	24,317	6,850	8	37,332	51,804	5,571	16
Clinton	0	0	--	0	6,716	0	3,358	2
Crawford	20,458	66,388	4,476	21	32,861	26,450	4,943	12
Eaton	95,199	12,056	4,125	26	35,545	14,542	3,339	15
Genesee	0	6,279	3,140	2	6,425	0	3,213	2
Gladwin	0	35,198	3,911	9	45,131	64,630	4,390	25
Grand Traverse	307,708	132,949	5,561	80	457,111	191,012	5,185	125
Gratiot	7,665	0	2,555	3	0	0	0	0
Hilldale	7,791	20,306	4,014	7	11,313	8,238	3,910	5
Huron	3,850	7,115	3,655	3	--	--	--	--
Ingham	50,757	19,570	3,716	20	43,729	12,535	3,517	16

TABLE XIII-13. OIL AND GAS WELL COMPLETIONS IN MICHIGAN, AND FOOTAGE DRILLED, BY COUNTY: 1981 AND 1982 (cont.)

	1981				1982			
	Total well footage				Total well footage			
County	Exploratory	Developmental	Average well depth	Total wells drilled	Exploratory	Developmental	Average well depth	Total wells drilled
Iosco	4,432	0	4,432	1	--	--	--	--
Isabella	3,899	55,490	3,712	16	33,916	162,065	4,225	48
Jackson	24,389	0	4,065	6	10,569	4,466	3,758	4
Kalamazoo	5,859	2,695	2,851	3	4,358	0	2,179	2
Kalkaska	130,086	75,250	6,244	42	209,186	125,472	5,397	62
Kent	--	--	--	--	3,125	0	3,125	1
Lapeer	0	82,225	3,281	27	0	25,463	2,315	11
Lenawee	0	0	--	0	8,021	0	4,011	2
Livingston	27,534	13,579	4,111	10	14,577	0	2,915	5
Macomb	21,523	10,253	3,531	9	23,297	8,115	3,141	10
Manistee	174,184	110,129	4,299	67	190,700	147,065	3,088	77
Mason	29,248	6,239	3,549	10	21,467	0	3,578	6
Mecosta	4,472	3,350	2,585	5	29,118	8,385	6,251	6
Midland	11,031	3,493	3,631	4	11,928	12,922	3,106	8
Missaukee	75,882	67,964	6,538	22	73,239	268,985	5,347	64
Monroe	0	0	--	0	5,694	0	2,847	2
Montcalm	3,278	3,301	3,290	2	0	33,459	2,788	12
Montmorency	30,740	6,135	4,609	8	22,663	0	5,666	4
Muskegon	0	3,476	1,738	2	3,850	1,672	2,761	2
Newaygo	15,457	7,205	2,518	9	15,510	7,840	2,594	9
Oakland	21,960	3,594	3,651	7	16,141	4,054	4,039	5
Oceana	14,699	10,615	3,616	7	29,908	3,360	2,376	14
Ogemaw	0	38,243	3,203	18	0	46,124	2,562	18
Osceola	31,662	0	7,916	4	44,430	0	6,347	7
Oscoda	15,520	0	7,760	2	28,021	8,655	5,239	7

TABLE XIII-13. OIL AND GAS WELL COMPLETIONS IN MICHIGAN, AND FOOTAGE DRILLED, BY COUNTY: 1981 AND 1982 (cont.)

County	1981				1982			
	Total well footage				Total well footage			
	Exploratory	Developmental	Average well depth	Total wells drilled	Exploratory	Developmental	Average well depth	Total wells drilled
Otsego	97,825	115,339	4,406	53	186,418	83,320	3,966	68
Ottawa	12,316	2,831	5,049	3	3,133	4,376	2,503	3
Presque Isle	106,502	12,897	3,227	37	54,372	30,596	3,268	26
Roscommon	12,288	40,994	4,809	12	10,165	141,234	4,453	34
Saginaw	3,096	10,795	2,778	5	16,882	5,145	3,147	7
Sanilac	0	0	--	0	7,824	0	7,824	1
St. Clair	14,537	8,257	2,533	9	16,301	5,686	2,198	10
St. Joseph	--	--	--	--	1,334	0	1,334	1
Shiawassee	--	--	--	--	1,860	0	1,860	1
Tuscola	17,604	36,820	3,887	14	17,831	22,173	3,637	11
Van Buren	1,069	14,635	1,122	14	4,726	8,890	1,238	11
Washtenaw	11,455	0	5,728	2	2,501	0	2,501	1
Wexford	34,623	14,509	5,459	9	28,395	0	5,679	5
TOTAL	1,766,593	1,255,759		779	2,088,433	1,758,535		966

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1981 and 1982 (Lansing: annually), Table 1.

NOTE: Does not include reworked wells or old wells drilled deeper.

TABLE XIII-14. WELL COMPLETIONS BY MAJOR AND INDEPENDENT COMPANIES IN 1982

	Exploratory			Development			Service	
	Oil	Gas	Dry	Oil	Gas	Dry	wells	Total
Major companies								
AMOCO	1	1	9	1	0	9	0	21
Marathon	0	0	0	7	0	0	5	12
Shell	7	5	62	21	2	22	4	123
Texaco	0	0	1	0	0	0	0	1
Other	0	0	3	91	0	2	3	99
Independents	46	28	305	196	21	92	22	710
TOTAL	54	34	380	316	23	125	34	966

SOURCE: Michigan Department of Natural Resources, special release.

NOTE: Total - Exploratory wells - 468
Development wells - 464
Service wells - 34

TABLE XIII-15. STATE OF MICHIGAN REVENUE FROM OIL AND NATURAL GAS PRODUCTION: 1927-1982

Years	Royalty	Rental	Bonus	Application, assignment fees	Total income
1927-1931	$ 85,263	$ 43,822	$ 27,707	$ 1,204	$ 157,996
1932-1936	209,126	205,350	87,211	4,506	506,193
1937-1941	1,302,356	724,330	515,706	7,367	2,549,759
1942-1946	1,645,462	2,021,513	601,065	3,759	4,271,800
1947-1951	1,813,632	2,256,914	1,307,470	4,398	5,382,414
1952-1956	2,727,410	1,989,343	257,187	3,028	4,976,968
1957-1961	1,879,927	769,594	475,841	3,702	3,129,064
1962-1966	1,259,162	1,476,950	409,809	4,982	3,150,903
1967	250,785	199,399	49,192	1,126	500,501
1968	324,934	451,117	1,223,971	2,849	2,002,870
1969	404,709	819,550	894,133	872	2,119,264
1970	429,796	929,596	-132	736	1,359,996
1971	749,815	858,360	1,361	426	1,609,962
1972	944,441	831,057	10,165,151	2,854	11,943,502
1973	1,960,854	1,261,208	3,133	1,658	3,226,852
1974	5,814,636	1,280,109	7,131,732	2,248	14,228,725
1975	9,637,835	1,297,691	514,248	2,603	11,452,378
1976	13,293,209	1,328,660	524,973	616	15,147,458
1977	13,327,908	1,190,620	357,006	3,069	14,878,603
1978	18,244,756	1,131,238	14,483	1,733	19,392,210
1979	24,269,564	1,100,307	1,414,667	1,047	26,785,585
1980[a]	24,488,631	1,015,879	- 2,983	1,679	25,503,206
1981[a]	44,912,776	1,216,258	32,277,235	1,860	78,408,109
1982[a]	45,802,472	908,025	10,304,780	17,715	57,032,992

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1981 (Lansing: 1983), table 36; and special release.

a. Figures compiled on a state fiscal year basis; prior years compiled on a calendar year basis.

TABLE XIII-16. PRINCIPAL MINERAL PRODUCERS IN MICHIGAN: 1981

Commodity and company	Address	Type of activity	County
Cement:			
Dundee Cement Co.[a,b]	Box 122 Dundee, MI 48131	Quarry and plant	Monroe
Medusa Cement Co., Medusa Corp. a subsidiary of Crane Co.[a,b]	Box 5668 Cleveland, OH 44101	Quarry and plant	Charlevoix
National Gypsum Co., Cement Div.[a,b]	4000 Town Center Suite 2000 Southfield, MI 48075	Quarry and plant	Alpena
Peerless Cement Co., Gifford-Hill & Co., Inc.[a]	9333 Dearborn St. Detroit, MI 48209	Quarry and plant	Wayne
Clay and shale:			
Michigan Brick Inc.	3820 Serr Rd. Corunna, MI 48817	Pit and plant	Shiawassee
Copper:			
White Pine Copper Div. of Range Co.[c]	Box 427 White Pine, MI 49971	Underground mine and plant	Ontonagon
Gypsum:			
Georgia-Pacific Corp.	900 WW 5th Ave. Portland, OR 97204	Underground mine and plant	Kent
Michigan Gypsum Co.	2840 Bay Rd. Saginaw, MI 48608	Open pit mine and plant	Iosco
National Gypsum Co.	4100 First International Bldg. Dallas, TX 75270	Open pit mine and plant	Iosco
United States Gypsum Co.	101 South Wacker Dr. Chicago, IL 60606	Open pit mine and plant	Iosco and Wayne

TABLE XIII-16. PRINCIPAL MINERAL PRODUCERS IN MICHIGAN: 1981 (cont.)

Commodity and company	Address	Type of activity	County
Iron ore:			
Cleveland-Cliffs Iron Co.[d]	504 Spruce St. Ishpeming, MI 49849	Open pit mines and plants	Marquette
Hanna Mining Co.	Star Route 1, Box 131 Iron Mountain, MI 49801	Open pit mine and plant	Dickinson
Iron and steel:			
Ford Motor Co.	American Rd. Dearborn, MI 48121	Plant	Wayne
McLouth Steel Corp.	300 S. Livernois Ave. Detroit, MI 48209	Plant	Wayne
National Steel Corp.	2800 Grant Bldg. Pittsburgh, PA 15219	Plant	Wayne
Lime:			
Detroit Lime Co., a subsidiary of Edw. C. Levy Co.	9300 Dix Ave. Dearborn, MI 48120	Plant	Wayne
Dow Chemical Co.Ludington Div.	2020 Dow Center Midland, MI 48640	Plant	Mason
Marblehead Lime Co., a division of General Dynamics Corp.	300 West Washington St. Chicago, IL 60606	Plant	Wayne
Natural salines[e]:			
Dow Chemical Co.	2020 Dow Center Midland, MI 48640	Brine wells and plant	Mason and Midland
Martin Marietta Chemicals Refractories Div.	Executive Plaza II Hunt Valley, MD 21030	Brine wells and plant	Mainstee
Morton Chemical Co.	110 North Wacher Dr. Chicago, IL 60606	Brine wells and plant	Manistee

TABLE XIII-16. PRINCIPAL MINERAL PRODUCERS IN MICHIGAN: 1981 (cont.)

Commodity and company	Address	Type of activity	County
Peat:			
Al-Par Peat Co.	9551 Krouse Ovid, MI 48866	Bog and plant	Shiawassee
Anderson Peat Co.	Box 575 Perry , MI 48872	Bog and plant	Lapeer and Shiawassee
Michigan Peat, Inc.	Box 66388 Houston, TX 77006	Bogs and plants	Sanilac
Salt:			
Diamond Crystal Salt Co.	916 South Riverside St. Clair, MI 48079	Brine wells and plant	St. Clair
International Salt Co. Inc.	12841 Saunders St. Detroit, MI 48217	Underground mine	Wayne
Sand and gravel:			
Construction:			
American Aggregates Corp.	Drawer 160 Greenville, OH 45331	Surface pits and stational plants	Kalamazoo, Livingston, Macomb, Oakland
Grand Rapids Gravel Co.	2700 28th St., SW Grand Rapids, MI 49509	Surface pits and stationary plants	Kent
Holly Sand & Gravel Co. Aggregate Div. of J.P. Burroughs & So., Inc.	Box 1468 Saginaw, MI 48605	Surface pit, stationary and portable plants	Oakland
Medusa Materials Co.	3135 Trabue Rd. Columbus, OH	Surface pit and stationary plant	Oakland
Spartan Aggreates	Box 25 Holt, MI 48842	Surface pits and stationary plants	Clinton, Genesee Ingham, Jackson, Oakland, Ottawa
Whittaker & Gooding Co.	5300 Cherry Hill Rd. Ypsilanti, MI 48197	Surface pits and stationary plants	Washtenaw

TABLE XIII-16. PRINCIPAL MINERAL PRODUCERS IN MICHIGAN: 1981 (cont.)

Commodity and company	Address	Type of activity	County
Sand and gravel:			
Industrial:			
Construction Aggregates Corp.	Box 6830 Perrysburg, MI 49409	Surface pit and stationary plant	Ottawa
Ottawa Silicon Co. Michigan Silicon Div.	Box 100 Rockwood, MI 48173	Surface pit and stationary plant	Wayne
Sand Products Corp.	2489 1st National Bldg. Detroit, MI 48226	Surface pits and stationary plants	Oceana
Sargent Sand Co.	2840 Bay Rd. Saginaw, MI 48608	Surface pit and stationary plant	Bay, Mason, Saginaw
Slag:			
Edward C. Levy Co.	8800 Dix Ave. Detroit, MI 48209	Plant	Wayne
Stone:			
Limestone:			
Drummond Dolomite Inc., Div. of Bethelhem Steel Corp.	Martin Tower Bethlehem, PA 18016	Quarry and plant	Chippewa
Inland Lime & Stone Co. Div. of Inland Steel Co.	Gulliver, MI 49840	Quarry and plant	Mackinac and Schoolcraft
Presque Isle Corp.	Box 426 Alpena, MI 49707	Quarry	Presque Isle
United States Steel Corp., Michigan Limestone Operations	Rogers City, MI 49779	Quarry	Mackinac and Presque Isle
Marl:			
Kevin D. Brenner	Route 1 Hopkins, MI 49328	Quarry	Allegan
Sandstone:			
Jude Stone Quarry Co.	338 Austin Rd. Napoleon, MI 49261	Quarry	Jackson

SOURCE: U. S. Bureau of Mines, Minerals Yearbook, 1981.

a. Also clay and shale.
b. Also stone
c. Also silver.
d. Also iron oxide pigments
e. Includes bromine, bromine compounds, calcium compounds, iodine, and magnesium compounds.

TABLE XIII-17. NATURAL GAS PLANT OPERATIONS IN MICHIGAN, BY PLANT OR FIELD: 1982

Plant or field	Total input (Mcf.)	Sales to pipe line (Mcf.)	Liquefied petroleum gas recovery (gallons)
Albion-Scipio	5,229,689	3,503,360	19,389,970
Aurelius	4,828,550	4,078,177	12,016,278
Beaver Creek	2,190,684	42,600	871,872
Chester	0	0	0
Columbus, Section 3	1,060,816	0	1,459,711
Convis	116,735	78,577	137,955
Frederic 15	162,343	14,506	0
Hamilton[a]	104,614	40,079	0
Kalkaska (Amoco)	40,125,847	36,985,506	96,680,333
Kalkaska (Shell)	76,207,029	62,352,328	327,773,670
Leonard	1,361,895	970,547	1,574,639
Manistee (Aztoc)	173,413	70,256	291,896
Marathon (Otter Lake)	794,997	761,766	1,503,050
Otsego 27	270,439	327,391	321,235
Reed City	9,951,253	0	2,832,727
Romeo	4,436,445	4,415,789	3,562,814
White Oak	503,215	471,270	810,077
Winterfield	827,173	720,083	2,650,107
TOTAL	148,345,137	114,864,230	471,871,339

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1982 (Lansing: 1984), Table 26.

NOTE: This table is the record of plants which are serving oil field operations, or which are extracting natural gas liquids from designated dry gas sources.

a. Receives and processes oil well gas only.

XIV. CONSTRUCTION

There have been three censuses of construction industries since 1939, one for 1967 and others for 1972 and 1977. Current law authorizes the U. S. Bureau of the Census to canvass the nation's industrial and business establishments at five-year intervals (for years ending in 2 and 7). These economic censuses cover construction industries, manufacturing, mining, retail, trade, selected services, selected transportation, and wholesale trade.

Each establishment is classified on the basis of its major economic activity: those primarily engaged in contract construction (general contractors or special trade contractors such as plumbing and electrical work), in construction for sales on their own account (operative builders), or in subdividing real property into lots (subdividers and developers, except cemeteries).

A construction establishment is a place of business from which such activities as estimating, bidding, scheduling, purchasing, supervision, and so forth, are conducted irrespective of the locations of construction sites that are not separate establishments in and of themselves. A construction concern engaging in two or more distinctly different lines of economic activity, such as wholesaling or retailing, reports on each separately, provided that each activity is of substantial size and that separate records are available or can be estimated for the activity.

Construction firms are divided into those with payroll and those without. The former were queried in a census survey as to whether they were large, medium, or small. Nonemployers were not required to complete a Census of Construction Industries questionnaire; instead, the Census Bureau obtained relevant information from administrative records of other agencies.

Current data on construction activity are available in two Census Bureau

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TABLE XIV-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF PRODUCTION WORKERS IN MICHIGAN AND UNITED STATES ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, OR DEVELOPING: 1956-1983

	Michigan				United States			
	Employment	Weekly		Hourly	Employment	Weekly		Hourly
Year	(000)	Hours	Earnings	earnings	(000)	Hours	Earnings	earnings
1956	101.1	38.5	114.48	2.98	3,039	37.5	96.38	2.57
1957	96.0	37.0	116.85	3.16	2,962	37.0	100.27	2.71
1958	85.9	36.9	123.00	3.33	2,817	36.8	103.78	2.82
1959	77.4	37.9	131.06	3.46	3,004	37.0	108.41	2.93
1960	97.2	37.5	131.03	3.49	2,926	36.7	112.67	3.07
1961	91.2	37.8	132.98	3.52	2,859	36.9	118.08	3.20
1962	88.0	34.9	134.37	3.85	2,948	37.0	122.47	3.31
1963	94.0	35.5	141.89	4.00	3,010	37.3	127.19	3.41
1964	99.5	35.3	145.79	4.13	3,097	37.2	132.06	3.55
1965	111.1	39.7	178.09	4.49	3,232	37.4	138.38	3.70
1966	115.2	39.4	188.77	4.79	3,317	37.6	146.26	3.89
1967	120.0	40.9	202.46	4.95	3,248	37.7	154.95	4.11
1968	107.7	39.2	211.33	5.39	3,350	37.3	164.49	4.41
1969	128.6	38.9	246.70	6.34	3,575	37.9	181.54	4.79
1970	118.5	37.2	257.09	6.91	3,588	37.3	195.45	5.24
1971	120.5	36.3	275.92	7.60	3,704	37.2	211.67	5.69
1972	127.5	36.5	290.37	7.96	3,889	36.5	221.19	6.06
1973	131.4	36.8	306.62	8.33	4,097	36.8	235.89	6.41
1974	125.8	36.5	319.99	8.76	4,020	36.6	249.25	6.81
1975	106.3	36.4	342.20	9.40	3,525	36.4	266.08	7.31
1976	110.0	36.9	362.90	9.84	3,576	36.8	283.73	7.71
1977	122.8	36.8	386.22	10.50	3,851	36.5	295.65	8.10
1978	138.8	38.4	424.74	11.06	4,229	36.8	318.69	8.66
1979	139.5	37.9	448.24	11.83	4,463	37.0	342.99	9.27
1980	116.8	36.2	457.35	12.63	4,346	37.0	367.78	9.94
1981	106.8	36.5	502.27	13.75	4,188	36.9	399.26	10.82
1982	89.5	36.0	518.15	14.37	3,911	36.7	426.45	11.62
1983	85.9	36.4	526.89	14.47	3,947	37.1	441.86	11.91

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, Employment and Earnings (Washington, D.C. monthly), March 1984, Tables B-1 and C-1.

TABLE XIV-2. SUMMARY STATISTICS FOR MICHIGAN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING: 1967, 1972, AND 1977

Item	1967	1972	1977
Proprietors and working partners			
Total	25,635	28,778	34,221
In establishments with payroll	11,086	10,423	9,199
Total receipts, establishments without payroll ($000)	219,527	344,525	651,641
	Establishments with payroll		
Number:			
With 1 - 9 employees	11,538	13,537	13,623
With 10 - 49 employees	2,238	2,489	2,419
With 50 - 99 employees	284	253	206
With 100 employees or more	145	125	105
Total	14,205	16,404	16,354
Number of employees:			
Mid-March	104,985	107,609	102,460
Mid-May	124,637	130,655	133,427
Mid-August	140,582	146,165	143,109
Mid-November	127,769	131,886	133,332
Average	125,853	130,828	128,198
Payroll, entire year ($000)	1,061,479	1,527,560	1,923,025
Construction workers:			
Mid-March	88,229	84,603	83,053
Mid-May	107,621	106,659	112,002
Mid-August	122,945	121,437	122,138
Mid-November	110,396	107,387	112,054
Average	108,637	106,685	107,420
Payroll, entire year ($000)	875,026	1,220,662	1,537,235
Total selected payments ($000)	2,338,513	3,231,495	4,326,389
Materials, components, and supplies ($000)	1,179,026	1,654,576	2,248,550
Construction work subcontracted to others ($000)	1,160,336	1,576,919	1,941,319
Total receipts ($000)	4,232,336	5,961,230	7,759,714
Total construction receipts ($000)	4,127,817	5,746,253	7,549,535
Receipts for work subcontracted in from others ($000)	865,871	1,278,948	1,852,362
Other business receipts and land receipts ($000)	103,094	214,977	210,179
Net construction receipts ($000)	2,967,588	4,169,334	5,608,217
Value added in construction ($000)	1,850,119	2,615,296	3,378,784

SOURCE: Bureau of the Census, U.S. Census of Construction Industries, 1977, Area Series, East North Central States (Washington, D.C.: 1980), CC77-A-3, Tables 3 and 4; and similar documents for previous years.

TABLE XIV-3. SUMMARY STATISTICS FOR UNITED STATES ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING: 1967, 1972 AND 1977

ITEM	1967	1972	1977
Number of establishments with payroll:			
With 1 - 9 employees	368,771	437,941	480,014
With 10 - 49 employees	301,587	351,494	391,345
With 50 - 99 employees	56,920	73,937	77,692
With 100 employees or more	6,419	7,991	7,041
Total	3,845	4,519	3,936
Proprietors and working partners;			
Total	696,813	748,253	1,013,961
In establishments with payroll	270,511	274,434	279,309
Total receipts, establishments without payroll ($000)	5,809,943	8,608,039	20,150,970
Establishments with payroll			
Number of employees;			
Mid-March	3,038,721	3,668,194	3,782,235
Mid-May	3,393,104	4,077,149	4,371,767
Mid-August	3,740,136	4,475,893	4,585,861
Mid-November	3,437,012	4,179,628	4,336,522
Average	3,436,265	4,145,779	4,272,659
Payroll, entire year ($000)	24,213,187	40,004,782	54,980,063
Construction workers:			
Mid-March	2,572,985	3,034,864	3,104,164
Mid-May	2,923,346	3,424,013	3,648,751
Mid-August	3,244,628	3,800,426	3,872,029
Mid-November	2,960,362	3,509,774	3,623,655
Average	2,960,308	3,486,592	3,565,469
Payroll, entire year ($000)	19,855,476	32,187,130	43,112,339
Total selected payments ($000)	52,451,424	84,623,758	112,110,369
Materials, components, & supplies ($000)	29,378,373	46,426,441	67,983,316
Construction work subcontracted to others ($000)	23,069,834	38,199,317	50,328,020
Total receipts ($000)	95,925,449	155,849,652	224,664,938
Total construction receipts ($000)	92,588,002	149,429,496	214,844,319
Receipts for work subcontracted in from others ($000)	17,959,822	30,857,137	49,806,349
Other business receipts and land receipts ($000)	3,341,090	6,420,156	9,820,620
Net construction receipts ($000)	69,520,058	111,232,179	164,516,299
Value added in construction ($000)	42,322,697	68,197,327	98,863,653

SOURCE; Bureau of the Census, *U.S. Census of Construction Industries, 1977, U.S. Summary* (Washington, D.C.: 1980), CC77-A-10, Tables 1 and 4; and similar documents for previous years.

TABLE XIV-4. RANKING OF MICHIGAN COUNTIES ACCORDING TO EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

	Percentage			Percentage	
County	1972	1982	County	1972	1982
Midland	6.47	18.12	Macomb	6.12	3.69
Montmorency	12.66	13.77	Alpena	5.94	3.68
St. Clair	5.84	12.90	Washtenaw	4.37	3.51
Alcona	9.99	12.38	Otsego	(D)	3.45
Kalkaska	13.66	11.89	Huron	3.66	3.45
Mackinac	(D)	10.60	Lapeer	4.09	3.34
Benzie	14.14	9.87	Marquette	5.39	3.28
Dickinson	12.44	9.67	Delta	4.95	3.23
Leelanau	11.56	8.58	Iosco	3.83	3.06
Cheboygan	9.39	8.58	Manistee	5.41	3.02
Iron	20.87	8.22	Montcalm	3.36	2.94
Van Buren	8.09	7.89	Calhoun	3.80	2.94
Oscoda	9.19	6.96	Saginaw	5.35	2.92
Emmet	11.60	6.89	Jackson	5.81	2.90
Baraga	(D)	6.47	Mecosta	5.43	2.84
Clare	6.35	6.33	Barry	3.94	2.83
Gladwin	7.87	6.04	St. Joseph	4.43	2.68
Missaukee	9.48	5.52	Ingham	5.58	2.67
Houghton	8.83	5.37	Allegan	5.49	2.64
Mason	24.26	5.24	Ontonagon	1.35	2.59
Chippewa	4.54	5.14	Shiawassee	4.16	2.57
Lake	4.33	5.12	Sanilac	3.79	2.55
Grand Traverse	10.25	5.03	Wayne	4.58	2.50
Charlevoix	5.89	4.97	Newaygo	4.39	2.46
Clinton	8.17	4.92	Ionia	4.20	2.37
Livingston	7.63	4.88	Tuscola	3.85	2.33
Ogemaw	10.25	4.84	Genesee	4.51	2.30
Berrien	4.27	4.73	Alger	(D)	2.26
Oakland	9.48	4.59	Hillsdale	3.20	2.26
Kent	6.78	4.52	Arenac	2.49	2.18
Oceana	2.96	4.52	Cass	(D)	2.03
Antrim	7.92	4.30	Schoolcraft	3.96	2.01
Roscommon	4.99	4.30	Lenawee	3.02	2.00
Gogebic	5.74	4.24	Gratiot	3.91	1.96
Muskegon	5.20	4.16	Branch	3.37	1.85
Kalamazoo	6.86	3.99	Presque Isle	3.45	1.84
Osceola	3.17	3.99	Wexford	4.43	1.82
Eaton	5.56	3.99	Luce	1.76	1.58
Ottawa	6.57	3.97	Keweenaw	0.00	(D)
Isabella	4.76	3.93	Monroe	6.43	(D)
Bay	6.38	3.89			
Crawford	5.55	3.80	Michigan	5.64	3.75
Menominee	4.80	3.77	United States	6.42	5.29

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XIV-5. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN ESTABLISHMENTS WHOSE PRIMARY ECONOMIC ACTIVITY IS CONTRACT CONSTRUCTION, SUBDIVIDING, AND DEVELOPING: 1981-1982

	Percentage change			Percentage change	
County	1972-1982	1981-1982	County	1972-1982	1981-1982
Washtenaw	110	45	Hillsdale	41	-13
Ontonagon	168	23	Osceola	169	-14
Midland	611	17	Macomb	19	-14
St. Clair	404	17	Arenac	93	-14
Oceana	243	17	Bay	26	-14
Dickinson	81	10	Kalamazoo	44	-14
Baraga	(D)	7	Ottawa	55	-15
Delta	51	6	Iron	-16	-15
Benzie	46	4	Lenawee	9	-15
Berrien	86	4	Calhoun	47	-15
Mackinac	(D)	3	Oakland	24	-16
Clare	119	0	Livingston	74	-17
Luce	113	-2	Chippewa	58	-17
Roscommon	103	-4	Menominee	75	-18
Houghton	38	-4	Lapeer	79	-18
Huron	92	-4	Wexford	10	-18
Lake	68	-5	Alpena	15	-18
Oscoda	38	-5	Charlevoix	94	-18
Gladwin	67	-5	Allegan	10	-19
Sanilac	15	-5	Cheboygan	99	-20
Montmorency	67	-6	Grand Traverse	52	-22
Newaygo	14	-7	Ingham	14	-23
St. Joseph	26	-7	Eaton	53	-23
Tuscola	29	-7	Barry	43	-24
Crawford	82	-8	Kalkaska	426	-25
Ogemaw	9	-8	Isabella	123	-26
Jackson	-6	-9	Marquette	36	-27
Leelanau	39	-9	Saginaw	5	-27
Mecosta	18	-9	Mason	-66	-28
Van Buren	99	-9	Ionia	18	-30
Kent	61	-10	Missaukee	30	-31
Cass	(D)	-10	Presque Isle	9	-32
Montcalm	99	-10	Gratiot	-4	-34
Branch	15	-11	Otsego	(D)	-36
Emmet	29	-11	Genesee	3	(D)
Clinton	33	-11	Gogebic	32	(D)
Alcona	145	-11	Keweenaw	(D)	(D)
Muskegon	61	-12	Monroe	(D)	(D)
Iosco	47	-12	Schoolcraft	20	(D)
Manistee	13	-12	Shiawassee	11	(D)
Alger	(D)	-13			
Wayne	-10	-13	Michigan	34	-10
Antrim	10	-13	United States	101	-1

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XIV-6. NUMBER OF RESIDENTIAL AND NONRESIDENTIAL UNITS AUTHORIZED IN MICHIGAN PERMIT ISSUING PLACES, BY CATEGORY: 1978-1982 AND PRELIMINARY 1983

Category	Number of units					
	1978	1979	1980	1981	1982	1983
One-family houses	43,323	33,926	17,870	11,595	8,288	14,260
Two-family buildings	1,052	1,046	780	454	248	394
Three- & four-family buildings	1,223	1,522	999	874	432	819
Five- or more family buildings	15,412	12,715	9,327	5,994	5,409	4,929
Total	61,010	49,209	28,976	18,917	14,377	20,402
Mobile homes (house trailers)[a]	5,667	5,572	4,768	4,922	4,427	3,926
Transient hotels, motels, tourist courts and cabins	1,517	2,204	1,629	724	859	796
Other shelters	83	205	123	76	27	88
Amusement & recreational bldgs.	210	175	125	133	146	119
Churches & other religious bldgs.	202	202	142	126	137	102
Industrial buildings	1,468	1,450	789	634	479	540
Parking garages (open to gen'l. public)	421	246	320	199	16	8
Residential garages & carports	18,964	17,896	13,241	13,271	13,357	13,059
Service stations & repair garages	156	141	118	117	104	77
Hospitals & other inst'l. bldgs.	82	77	42	42	29	40
Office, bank, & professional bldgs.	720	739	542	459	310	406
Public works & utilities bldgs.	125	123	83	152	128	85
Schools & other educational bldgs.	73	66	42	39	39	33
Stores & other mercantile bldgs.	1,502	1,509	934	787	620	686
Other nonresidential buildings	6,221	6,756	5,734	5,882	5,648	5,349
Structures other than buildings	6,443	5,505	5,149	5,281	3,881	4,308
Additions, alterations, & conversions						
Housekeeping residential buildings	55,430	56,519	50,793	52,398	42,583	42,694
All other buildings & structures	12,878	12,805	12,714	12,511	11,941	12,522

SOURCE: Bureau of the Census, special release.

a. Includes only house trailers for which building permits are issued.

TABLE XIV-7. VALUATION OF RESIDENTIAL AND NONRESIDENTIAL UNITS AUTHORIZED IN MICHIGAN PERMIT ISSUING PLACES, BY CATEGORY: 1978-1982 AND PRELIMINARY 1983

(In millions of dollars)

Category	1978	1979	1980	1981	1982	1983
One family houses	1,759.0	1,552.1	873.8	579.5	393.6	794.9
Two-family buildings	23.8	29.8	25.1	15.5	8.8	14.4
Three-and four-family buildings	27.3	37.0	31.1	26.9	13.6	28.5
Five- or more family buildings	294.3	281.0	234.1	199.9	177.3	149.7
Total	2,104.4	1,899.9	1,164.1	821.8	593.2	987.7
Mobile homes (house trailers)[a]	30.8	34.0	29.8	37.0	30.8	30.2
Transient hotels, motels, tourist courts and cabins	20.6	43.1	51.8	19.6	8.6	10.1
Other shelters	0.4	1.6	.9	.6	.3	1.5
Amusement and recreational buildings	36.3	59.3	11.9	21.9	17.8	12.6
Churches and other religious buildings	34.5	46.4	30.1	25.0	30.5	21.4
Industrial buildings	432.9	528.1	322.1	366.9	312.4	205.7
Parking garages (open to general public)	9.3	19.2	15.3	9.8	9.3	11.8
Residential garages and carports	66.5	67.2	53.0	56.8	56.3	57.4
Service stations and repair garages	6.7	5.2	4.8	4.4	5.5	5.3
Hospitals and other institutional buildings	82.8	62.7	51.9	71.6	34.6	52.1
Office, bank, and professional buildings	156.8	222.6	260.8	211.9	121.0	204.2
Public works and utilities buildings	53.1	21.7	74.0	33.2	15.5	10.1
Schools and other educational buildings	15.7	11.7	37.9	12.9	5.9	24.9
Stores and other mercantile buildings	294.4	296.3	158.1	149.0	72.3	107.1
Other nonresidential buildings	45.6	54.6	51.3	43.3	44.5	46.5
Structures other than buildings	32.4	30.8	23.9	22.6	21.9	20.8
Housekeeping residential buildings	197.6	233.1	240.9	235.1	204.8	254.7
All other buildings and structures	165.5	189.1	537.3	412.7	349.9	408.5

SOURCE: Bureau of the Census, Special release.

a. Includes only house trailers for which building permits are issued.

TABLE XIV-8. NUMBER AND VALUATION OF NEW HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN: 1973-1982

		Privately owned					
		In structures with					
Year		1 unit	2 units	3 and 4 units	5 units or more	Total	Publicly owned (contract awards)
1973	No. of housing units	37,622	1,232	2,288	30,116	71,258	--
	Valuation ($000)	935,621	19,930	39,065	378,694	1,373,310	--
1974	No. of housing units	26,793	864	728	15,806	44,191	100
	Valuation ($000)	714,199	13,759	11,192	227,254	966,405	2,360
1975	No. of housing units	26,885	598	524	8,762	36,769	211
	Valuation ($000)	792,694	10,550	7,633	130,582	941,459	3,903
1976	No. of housing units	33,093	906	729	11,167	45,893	--
	Valuation ($000)	1,059,841	17,059	13,592	173,427	1,263,919	--
1977	No. of housing units	42,265	856	1,000	14,936	59,057	--
	Valuation ($000)	1,516,811	17,530	21,786	256,438	1,812,567	--
1978	No. of housing units	43,323	1,052	1,223	15,412	61,010	--
	Valuation ($000)	1,758,970	23,820	27,362	294,264	2,104,418	--
1979	No. of housing units	33,926	1,046	1,522	12,715	49,209	48
	Valuation ($000)	1,552,062	29,889	36,971	280,931	1,899,854	2,518
1980	No. of housing units	17,870	780	999	9,327	28,976	852
	Valuation ($000)	873,789	25,091	31,094	234,168	1,164,142	--
1981	No. of housing units	11,449	450	874	5,994	18,767	305
	Valuation ($000)	574,559	15,501	26,904	199,928	816,892	--
1982	No. of housing units	8,113	246	432	5,385	14,276	100
	Valuation ($000)	388,161	8,655	13,625	176,509	586,950	--

SOURCE: Bureau of Census, Construction Reports, Housing Units Authorized by Building Permits and Public Contracts, 1973 through 1982 (Washington, D.C.: annually), Table 2.

TABLE XIV-9. NUMBER OF NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS: 1975-1982

SMSA	Year	In structures with 1 unit	 2 units	 3 and 4 units	 5 units or more	Total
Ann Arbor	1975	556	8	0	69	633
	1976	821	4	0	280	1,105
	1977	1,266	18	0	386	1,670
	1978	1,460	16	0	914	2,390
	1979	1,078	30	23	171	1,302
	1980	453	22	4	442	921
	1981	245	26	-	-	271
	1982	142	8	4	60	214
Battle Creek	1975	418	6	0	230	654
	1976	651	10	0	300	961
	1977	554	4	20	267	845
	1978	534	2	44	201	781
	1979	497	18	70	246	831
	1980	273	10	0	409	692
	1981	207	4	8	-	219
	1982	170	0	0	6	176
Bay City	1975	403	6	0	72	481
	1976	458	2	12	350	822
	1977	525	2	0	0	527
	1978	494	6	0	0	500
	1979	309	10	27	0	346
	1980	169	0	0	5	174
	1981	87	0	0	0	87
	1982	53	2	0	16	71
Detroit	1975	9,964	74	165	3,801	13,004
	1976	13,070	80	300	4,764	18,214
	1977	18,239	106	471	5,895	24,711
	1978	18,625	100	628	7,056	26,409
	1979	13,645	208	648	5,554	20,050
	1980	5,660	108	465	3,459	9,692
	1981	2,891	56	116	2,397	5,460
	1982	1,979	36	121	2,467	4,603
Flint	1975	1,206	4	11	264	1,485
	1976	1,447	8	8	398	1,861
	1977	2,067	8	60	1,147	3,282
	1978	2,192	12	19	1,054	3,277
	1979	1,577	32	71	601	2,281
	1980	873	14	16	341	1,244
	1981	465	14	15	137	631
	1982	299	6	0	48	353
Grand Rapids	1975	2,141	184	96	1,006	3,427
	1976	2,325	274	65	1,147	3,811
	1977	2,775	280	58	1,450	4,563
	1978	3,106	438	115	2,173	5,832
	1979	2,554	302	174	1,093	4,123
	1980	1,701	250	58	618	2,627
	1981	1,209	124	194	382	1,909
	1982	912	64	59	511	1,546

TABLE XIV-9. NUMBER OF NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS: 1975-1982 (cont.)

		In structures with				
SMSA	Year	1 unit	2 units	3 and 4 units	5 units or more	Total
Jackson	1975	427	4	10	449	890
	1976	612	36	18	250	916
	1977	544	0	3	630	1,177
	1978	529	6	0	128	663
	1979	615	10	7	139	771
	1980	219	6	--	48	273
	1981	163	2	16	--	181
	1982	100	4	8	243	355
Kalamazoo Portage	1975	823	34	43	755	1,655
	1976	937	34	75	926	1,972
	1977	1,271	18	154	1,197	2,640
	1978	1,117	22	111	424	1,674
	1979	996	10	112	750	1,838
	1980	634	34	79	901	1,648
	1981	420	40	151	803	1,414
	1982	249	10	55	118	432
Lansing	1975	1,266	84	31	484	1,865
	1976	1,620	136	55	698	2,509
	1977	2,144	100	78	1,478	3,800
	1978	2,013	138	130	1,174	3,455
	1979	2,237	122	190	1,437	3,986
	1980	1,302	78	92	734	2,206
	1981	725	58	154	734	1,671
	1982	480	18	18	256	772
Muskegon-Muskegon Heights-Norton Shores	1975	639	0	0	0	639
	1976	662	36	24	441	1,163
	1977	747	6	0	020	873
	1978	852	12	0	309	1,173
	1979	620	10	12	32	674
	1980	405	15	--	384	803
	1981	248	30	36	48	362
	1982	216	0	0	107	323
Saginaw	1975	660	66	32	127	885
	1976	776	122	8	135	1,041
	1977	875	112	36	320	1,343
	1978	955	104	16	176	1,251
	1979	708	146	0	396	1,250
	1980	315	48	120	44	527
	1981	158	16	--	64	238
	1982	104	4	0	144	252

SOURCE: Bureau of the Census, Housing Units Authorized by Building Permits and Public Contracts, 1975 through 1982 (Washington, D.C.: annually), Table 5.

TABLE XIV-10. VALUATION OF NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS: 1975-1982

(In thousands of dollars)

SMSA	Year	In structures with 1 unit	2 units	3 and 4 units	5 units or more	Total
Ann Arbor	1975	20,165	154	0	1,086	21,405
	1976	28,613	58	0	3,507	32,179
	1977	48,267	357	0	7,125	55,749
	1978	65,889	391	0	14,960	81,241
	1979	59,770	1,222	1,039	3,341	65,378
	1980	31,342	939	157	12,852	45,290
	1981	15,337	722	--	--	16,059
	1982	12,733	388	240	5,465	18,825
Battle Creek	1975	10,436	118	0	1,706	12,259
	1976	18,812	218	0	3,140	22,170
	1977	17,257	85	364	3,112	20,818
	1978	17,561	72	1,981	2,230	21,843
	1979	18,657	585	1,520	3,076	23,839
	1980	11,720	292	0	8,254	20,266
	1981	9,252	88	180	--	9,520
	1982	5,843	--	--	45	5,888
Bay City	1975	9,342	123	0	922	10,387
	1976	12,122	30	185	3,299	15,636
	1977	16,049	25	0	0	16,074
	1978	17,251	75	0	0	17,326
	1979	12,774	282	1,119	0	14,175
	1980	6,739	0	0	363	7,103
	1981	3,391	--	--	--	3,391
	1982	1,929	38	--	350	2,317
Detroit	1975	334,864	1,256	2,471	72,278	420,849
	1976	487,264	1,390	6,662	90,723	586,039
	1977	754,541	2,261	11,286	127,298	895,387
	1978	877,358	2,337	14,434	156,342	1,050,469
	1979	730,391	6,134	15,015	138,104	889,645
	1980	344,559	4,225	16,289	90,887	455,960
	1981	183,182	2,140	6,154	102,633	294,109
	1982	118,077	1,725	4,281	102,702	226,784
Flint	1975	33,005	64	194	2,667	35,929
	1976	40,549	248	96	6,409	47,302
	1977	65,605	283	1,169	12,955	80,011
	1979	66,107	1,156	1,936	11,349	80,551
	1980	35,806	375	571	10,020	46,772
	1981	22,321	407	449	2,602	25,780
	1982	15,224	200	--	1,045	16,469
Grand Rapids	1975	63,566	3,144	,293	10,231	78,233
	1976	74,150	4,848	1,129	14,664	94,791
	1977	99,326	5,432	905	17,443	123,106
	1978	123,887	9,754	2,325	33,386	169,352
	1979	120,300	8,496	3,865	22,277	154,937
	1980	83,909	8,486	1,477	14,723	108,594
	1981	58,781	4,077	4,818	11,121	78,796
	1982	47,260	2,162	1,801	13,308	64,531

TABLE XIV-10. VALUATION OF NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS: 1975-1982 (cont.)

(In thousands of dollars)

SMSA	Year	In structures with 1 unit	 2 units	 3 and 4 units	 5 units or more	Total
Jackson	1975	9,592	80	167	5,569	15,408
	1976	14,511	476	272	3,738	18,997
	1977	15,648	0	60	7,515	23,223
	1978	17,560	114	0	1,554	19,228
	1979	21,290	186	191	2,566	24,232
	1980	8,399	188	--	959	9,546
	1981	7,599	58	576	--	8,233
	1982	4,105	208	293	5,146	9,752
Kalamazoo-Portage	1975	27,097	632	729	8,482	36,940
	1976	32,420	708	1,342	13,346	47,816
	1977	45,280	472	2,762	20,318	68,831
	1978	47,307	403	1,978	6,851	56,540
	1979	46,021	293	2,329	12,568	61,211
	1980	32,597	1,064	2,509	21,916	58,086
	1981	24,407	2,166	5,157	26,052	57,781
	1982	14,084	383	1,588	3,042	19,097
Lansing-East Lansing	1975	38,452	1,705	789	5,762	46,709
	1976	52,967	3,563	1,222	7,996	65,749
	1977	74,916	2,862	2,668	22,066	102,512
	1978	80,384	4,177	3,348	18,593	106,503
	1979	97,525	4,437	5,168	27,911	135,041
	1980	60,507	2,571	3,493	18,502	85,073
	1981	36,172	1,877	3,713	19,526	61,289
	1982	24,263	566	848	6,527	32,204
Muskegon-Muskegon Heights-Norton Shores	1975	15,146	0	0	0	15,146
	1976	16,471	431	360	4,745	22,008
	1977	21,762	95	0	1,000	22,857
	1978	26,935	238	0	5,768	32,940
	1979	23,650	240	175	680	24,745
	1980	17,796	388	0	10,437	28,622
	1981	10,650	890	464	960	12,964
	1982	9,544	--	--	3,170	12,714
Saginaw	1975	19,327	1,204	386	1,595	22,511
	1976	24,027	2,081	108	1,330	27,546
	1977	29,251	1,927	293	6,039	37,510
	1978	35,896	1,946	299	2,139	40,280
	1979	29,803	3,844	0	7,669	41,316
	1981	7,162	539	--	1,234	8,936
	1982	4,531	135	--	2,650	7,315

SOURCE: Bureau of the Census, Construction Reports, Housing Units Authorized by Building Permits and Public Contracts, 1975 through 1982 (Washington, D.C.: annually), Table 3.

TABLE XIV-11. NUMBER OF NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED IN PERMIT ISSUING PLACES IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS, INSIDE AND OUTSIDE OF CENTRAL CITIES: 1982

	In structures with				
SMSA	1 unit	2 units	3 and 4 units	5 units or more	Total
Ann Arbor	142	8	4	60	214
Ann Arbor	42	--	--	60	102
Outside central city	100	8	4	--	112
Battle Creek	170	--	--	6	176
Battle Creek	2	--	--	--	2
Outside central city	168	--	--	6	174
Bay City	53	2	--	16	71
Bay City	1	--	--	--	1
Outside central city	52	2	--	16	70
Detroit	1,979	36	121	2,467	4,603
Detroit	183	20	8	846	1,057
Outside central city	1,796	16	113	1,621	3,546
Flint	299	6	--	48	353
Flint	8	--	--	--	8
Outside central city	291	6	--	48	345
Grand Rapids	912	64	59	511	1,546
Grand Rapids	49	22	--	268	339
Outside central city	863	42	59	243	1,207
Jackson	100	4	8	243	355
Jackson	2	--	--	100	102
Outside central city	98	4	8	143	253
Kalamazoo-Portage	249	10	55	118	432
Kalamazoo	7	2	--	32	41
Portage	52	2	7	6	67
Outside central cities	190	6	48	80	324
Lansing-East Lansing	480	18	18	256	772
Lansing	73	8	4	100	185
East Lansing	8	--	--	--	8
Outside central cities	399	10	14	156	579
Muskegon-Muskegon Heights-Norton Shores	216	--	--	107	323
Muskegon	1	--	--	--	1
Muskegon Heights	--	--	--	--	--
Norton Shores	20	--	--	--	20
Outside central cities	195	--	--	107	302
Saginaw	104	4	--	144	252
Saginaw	3	--	--	120	123
Outside central city	101	4	00	24	129

SOURCE: Bureau of the Census, Construction Reports, Housing Units Authorized by Building Permits and Public Contracts: Annual 1982, (Washington, D.C.), Table 3.

TABLE XIV-12. ANNUAL CONSTRUCTION CONTRACT AWARDS IN MICHIGAN, 1967-1983, AND THE UNITED STATES, 1978-1983

(In thousands of dollars)

Year	Non-residential	Residential	Total building	Public works and utilities	Total construction
			Michigan		
1967	946,513	1,020,000	1,966,513	357,000	2,323,513
1968	912,849	1,029,581	1,942,430	407,537	2,349,967
1969	962,697	891,531	1,854,228	874,715	2,728,943
1970	955,592	942,760	1,898,352	1,052,245	2,950,597
1971	874,058	1,319,978	2,194,036	840,719	3,034,755
1972	1,010,891	1,596,633	2,607,524	842,780	3,450,304
1973	1,206,481	1,856,354	3,062,835	1,299,276	4,362,111
1974	1,355,623	1,314,147	2,669,770	791,628	3,461,398
1975	951,139	1,089,145	2,040,284	1,146,796	3,187,080
1976	1,115,512	1,470,420	2,585,932	590,478	3,176,410
1977	1,525,733	2,144,489	3,670,222	604,463	4,274,685
1978	1,752,267	2,469,130	4,221,397	1,821,304	6,042,701
1979	1,975,434	2,392,063	4,367,497	889,324	5,156,821
1980	1,970,299	1,535,367	3,505,655	667,944	4,173,610
1981	1,336,850	1,122,958	2,459,808	798,406	3,258,214
1982	1,149,956	856,444	2,006,400	481,218	2,487,618
1983	1,277,800	1,470,100	2,747,900	764,900	3,512,800
			United States		
1978	45,045,834	74,949,473	119,995,307	39,934,701	159,930,008
1979	50,205,900	74,557,500	124,763,400	43,682,500	168,445,900
1980	52,491,400	63,667,700	116,159,100	32,233,700	148,392,800
1981	60,087,700	60,164,000	120,251,700	33,227,900	153,479,600
1982	59,207,500	58,076,300	117,283,800	37,335,600	154,619,400
1983	61,904,700	93,200,900	155,105,600	37,645,200	192,750,800

SOURCE: F. W. Dodge Division of McGraw-Hill Information Systems Company, special release.

TABLE XIV-13. NONRESIDENTIAL AND RESIDENTIAL BUILDING AWARDS IN MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS: 1982 AND 1983

(In thousands of dollars)

Area	Nonresidential		Residential		Total	
	1982	1983	1982	1983	1982	1983
Ann Arbor	72,400	140,500	19,267	33,100	91,667	173,600
Battle Creek	48,764	15,000	10,430	27,100	59,194	42,100
Bay City	7,736	14,800	7,845	10,400	15,581	25,200
Detroit	511,253	593,200	316,754	596,200	828,007	1,189,400
Flint	44,169	45,900	26,081	36,600	70,250	82,500
Grand Rapids	124,288	159,700	78,119	149,800	202,407	309,500
Jackson	7,309	17,700	8,851	16,600	16,160	34,300
Kalamazoo-Portage	135,950	43,700	32,483	50,200	168,433	93,900
Lansing-E. Lansing	46,929	86,600	41,868	101,200	88,797	187,800
Muskegon-Muskegon Heights-Norton Shores	23,981	9,700	14,321	24,500	38,302	34,200
Saginaw	22,167	21,500	15,896	16,400	38,063	37,900
Toledo	139,626	145,000	99,251	136,800	238,877	281,800
Michigan	1,149,956	1,277,800	856,444	1,470,100	2,006,400	2,747,900
United States	59,207,500	61,904,700	58,076,300	93,200,900	117,283,800	155,105,600

SOURCE: F. W. Dodge Division of McGraw-Hill Information Systems Company, special release.

TABLE XIV-14. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1981, 1982 AND 1983

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)	Number of buidings	Value ($1000)
Alcona	1981	53	1,929	0	0	0	0	0	0
	1982	36	1,150	0	0	0	0	0	0
	1983	60	2,139	1	60	2	52	1	25
Alger	1981	30	1,226	0	0	0	0	12	1,079
	1982	32	455	0	0	0	0	4	102
	1983	30	5,209	0	0	0	0	4	217
Allegan	1981	175	10,281	16	871	4	506	14	479
	1982	247	7,747	18	1,158	1	17	9	312
	1983	326	11,094	13	775	3	587	13	670
Alpena	1981	92	2,731	8	252	0	0	4	4,705
	1982	53	1,635	0	0	0	0	4	184
	1983	39	1,212	1	40	0	0	2	127
Antrim	1981	182	6,683	2	44	0	0	1	15
	1982	161	5,701	1	110	0	0	2	1,106
	1983	197	8,594	1	350	0	0	0	0
Arenac	1981	37	1,000	0	0	0	0	0	0
	1982	38	1,058	0	0	0	0	0	0
	1983	39	1,118	0	0	0	0	0	0
Baraga	1981	21	541	1	16	0	0	0	0
	1982	16	248	0	0	0	0	0	0
	1983	46	736	3	74	1	49	1	110
Barry	1981	114	4,127	1	4	1	10	4	31
	1982	116	3,767	2	245	0	0	1	1
	1983	160	6,005	11	253	1	30	1	25
Bay	1981	92	3,634	4	97	8	662	15	1,664
	1982	75	2,481	5	1,189	5	503	3	117
	1983	116	4,847	5	895	1	99	9	6,276
Benzie	1981	110	2,810	0	0	0	0	1	5
	1982	84	2,399	0	0	0	0	0	0
	1983	101	3,361	0	0	1	80	0	0
Berrien	1981	447	12,482	17	6,300	7	1,651	10	967
	1982	221	6,161	9	4,253	12	2,649	12	975
	1983	312	11,671	9	1,210	4	3,750	10	532

TABLE XIV-14. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1981, 1982 AND 1983 (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)
Branch	1981	87	2,358	3	121	0	0	5	101
	1982	48	1,457	0	0	0	0	0	0
	1983	95	2,749	1	64	1	59	3	141
Calhoun	1981	105	5,393	4	4,406	7	1,029	10	554
	1982	60	2,121	4	121	2	759	12	1,937
	1983	130	4,760	4	592	10	1,238	8	827
Cass	1981	115	3,741	1	18	0	0	1	2
	1982	95	3,230	5	451	0	0	5	91
	1983	58	2,512	8	298	0	0	6	859
Charlevoix	1981	147	7,393	0	0	1	100	1	141
	1982	134	4,866	0	0	1	117	2	373
	1983	112	4,639	0	0	1	136	1	500
Cheboygan	1981	69	3,222	0	0	0	0	6	1,214
	1982	62	3,063	9	3,355	1	729	1	198
	1983	149	6,091	1	350	0	0	1	198
Chippewa	1981	9	299	1	5	4	226	1	33
	1982	16	547	0	0	1	226	3	170
	1983	19	584	0	0	0	0	0	0
Clare	1981	122	4,349	0	0	2	1,083	3	607
	1982	59	2,458	2	745	2	1,271	4	399
	1983	94	2,924	0	0	1	704	1	189
Clinton	1981	164	6,501	11	1,640	4	2,451	9	9,306
	1982	113	4,838	1	13	0	0	5	360
	1983	150	7,529	2	117	2	275	8	357
Crawford	1981	126	3,357	18	6,462	0	0	3	112
	1982	52	1,871	1	80	1	28	2	57
	1983	88	3,172	1	49	2	297	5	1,381
Delta	1981	123	4,234	2	393	3	165	5	484
	1982	151	4,961	4	224	0	0	4	581
	1983	135	4,434	5	221	2	106	2	340
Dickinson	1981	102	3,628	20	59,677	1	150	0	0
	1982	43	2,007	3	150	0	0	4	778
	1983	77	3,027	4	1,170	1	100	2	454

TABLE XIV-14. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1981, 1982 AND 1983 (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)
Eaton	1981	243	9,863	4	3,030	4	1,676	7	1,797
	1982	136	6,093	5	780	3	685	15	2,217
	1983	250	13,092	4	4,249	6	2,633	6	839
Emmet	1981	176	10,981	4	135	0	0	3	287
	1982	107	5,524	4	128	0	0	0	0
	1983	117	6,398	2	380	0	0	1	39
Genesee	1981	505	21,080	15	6,656	38	6,800	65	9,675
	1982	304	14,324	7	1,710	37	3,957	33	5,348
	1983	687	26,543	21	4,116	44	8,202	53	6,969
Gladwin	1981	131	6,261	0	0	1	541	2	206
	1982	88	4,383	0	0	4	2,918	2	268
	1983	126	5,837	1	350	2	1,409	2	387
Gogebic	1981	47	1,852	0	0	2	148	2	1,022
	1982	127	3,248	2	35	0	0	3	253
	1983	69	2,047	0	0	0	0	6	605
Grand	1981	535	17,681	6	1,599	12	2,287	16	611
Traverse	1982	282	10,601	6	497	6	753	12	1,676
	1983	431	19,637	10	489	6	768	16	832
Gratiot	1981	54	2,152	5	661	3	403	2	18
	1982	25	858	4	2,793	0	0	3	101
	1983	32	1,366	4	626	0	0	7	146
Hillsdale	1981	48	1,277	2	387	3	89	0	0
	1982	86	2,464	1	36	1	160	1	7
	1983	112	2,654	2	121	1	189	3	195
Houghton	1981	54	1,858	3	2,379	3	287	7	1,205
	1982	49	1,565	1	30	1	50	2	400
	1983	57	1,965	0	0	1	80	7	497
Huron	1981	101	3,518	2	372	1	46	2	4,100
	1982	84	2,697	7	737	2	40	1	16
	1983	180	5,147	3	1,300	6	984	11	1,691
Ingham	1981	1,196	41,268	8	2,018	7	5,292	18	7,456
	1982	408	17,778	6	4,147	16	17,595	33	2,383
	1983	707	32,591	7	499	18	9,757	35	4,594

TABLE XIV-14. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1981, 1982 AND 1983 (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)
Ionia	1981	68	3,656	7	346	3	281	0	0
	1982	115	3,495	4	219	4	215	17	287
	1983	105	3,467	10	1,065	1	53	12	166
Iosco	1981	67	2,672	4	351	3	321	4	207
	1982	93	2,252	6	183	1	8	3	99
	1983	126	3,747	5	151	2	24	6	973
Iron	1981	15	561	2	13	1	375	0	0
	1982	16	422	0	0	1	40	0	0
	1983	24	801	1	195	1	400	1	66
Isabella	1981	99	3,657	5	783	13	2,813	8	421
	1982	168	4,855	4	112	1	50	7	411
	1983	172	6,172	4	177	3	111	13	550
Jackson	1981	184	8,275	4	351	12	3,318	12	1,135
	1982	361	9,931	7	188	11	571	14	460
	1983	186	7,576	10	956	8	875	11	296
Kalamazoo	1981	1,247	52,470	24	39,760	21	3,910	46	6,330
	1982	371	16,497	9	26,004	21	3,212	32	3,314
	1983	715	30,514	28	3,954	16	3,908	26	3,073
Kalkaska	1981	85	2,661	9	396	6	705	4	364
	1982	81	2,020	4	82	2	158	2	233
	1983	65	2,019	8	149	4	314	2	43
Kent	1981	1,130	52,348	61	27,426	22	9,372	39	6,367
	1982	1,149	47,585	34	46,704	15	19,469	25	4,847
	1983	1,877	86,670	63	12,330	33	8,676	46	7,029
Keweenaw	1981	9	231	0	0	0	0	0	0
	1982	33	875	0	0	0	0	0	0
	1983	6	127	0	0	0	0	0	0
Lake	1981	81	3,627	0	0	0	0	1	202
	1982	65	2,733	0	0	0	0	0	0
	1983	44	2,009	0	0	0	0	0	0
Lapeer	1981	147	6,840	5	502	3	399	6	203
	1982	96	4,653	8	419	2	385	4	318
	1983	187	8,204	8	1,141	6	636	7	219

TABLE XIV-14. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1981, 1982 AND 1983 (cont.)

County	Year	Residential		Industrial[a]		Offices[b]		Mercantile[c]	
		Number of dwellings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)
Leelanau	1981	144	5,946	1	20	4	6,492	3	6,421
	1982	109	5,521	1	126	3	111	2	8
	1983	146	6,693	2	53	1	70	4	305
Lenawee	1981	381	13,570	2	1,008	7	3,444	14	6,440
	1982	61	2,122	6	442	4	143	15	544
	1983	99	3,739	7	508	4	247	7	241
Livingston	1981	263	16,635	12	2,726	5	505	11	5,536
	1982	129	8,250	13	2,280	4	720	4	669
	1983	302	15,654	5	1,354	8	1,614	10	1,487
Luce	1981	9	207	0	0	0	0	2	350
	1982	6	217	0	0	0	0	1	9
	1983	23	602	0	0	0	0	0	0
Mackinac	1981	95	1,365	2	933	0	0	1	50
	1982	42	1,024	4	188	2	82	5	101
	1983	65	1,905	3	73	1	275	4	367
Macomb	1981	1,140	46,065	38	26,411	34	4,676	63	12,835
	1982	934	624	26	7,946	15	4,017	35	5,596
	1983	2,292	93,291	64	36,993	39	7,351	62	14,415
Manistee	1981	85	2,381	9	3,665	0	0	2	139
	1982	66	1,604	2	65	0	0	0	0
	1983	65	2,237	3	38	1	300	1	18
Marquette	1981	88	3,188	1	224	0	0	10	663
	1982	104	2,368	1	7	2	237	5	210
	1983	97	3,114	0	0	0	0	13	862
Mason	1981	99	2,603	3	3,890	0	0	3	129
	1982	196	4,384	6	60	0	0	3	58
	1983	70	1,722	6	314	1	40	5	98
Mecosta	1981	99	4,535	1	200	0	0	0	0
	1982	93	3,527	2	17	1	62	4	358
	1983	117	5,209	1	60	2	270	2	176
Menominee	1981	58	1,649	5	725	1	182	5	62
	1982	58	1,377	1	4	0	0	1	20
	1983	55	1,527	3	281	0	0	5	371

TABLE XIV-14. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1981, 1982 AND 1983 (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)	Number of building	Value ($1000)
Midland	1981	1,211	12,324	2	222	3	223	0	0
	1982	166	8,177	3	99	1	729	4	127
	1983	320	18,512	5	608	3	482	8	781
Missaukee	1981	97	2,520	0	0	1	90	0	0
	1982	40	1,043	1	12	1	40	3	110
	1983	75	2,323	2	34	0	0	2	89
Monroe	1981	149	7,967	6	911	4	1,138	7	1,299
	1982	164	6,423	11	5,866	4	323	7	495
	1983	292	11,660	4	331	4	464	10	1,041
Montcalm	1981	182	5,644	6	754	1	100	3	410
	1982	159	99	6	580	1	97	7	209
	1983	160	6,786	8	5,939	4	191	3	507
Montmorency	1981	64	3,108	2	761	1	399	1	202
	1982	39	1,933	1	373	1	729	0	0
	1983	84	3,732	1	350	1	704	0	0
Muskegon	1981	283	9,635	17	3,008	8	1,158	11	1,340
	1982	205	8,035	18	5,271	4	177	3	312
	1983	239	10,297	13	954	6	633	9	830
Newaygo	1981	116	2,789	2	287	0	0	8	913
	1982	197	5,040	2	33	1	49	7	117
	1983	124	3,170	3	7,045	0	0	20	1,240
Oakland	1981	1,844	137,252	88	31,975	79	115,986	88	15,665
	1982	1,607	84,591	64	20,366	50	33,863	52	8,553
	1983	3,546	235,546	76	27,176	78	115,631	58	13,880
Oceana	1981	82	3,429	3	355	3	255	2	16
	1982	122	4,829	0	0	3	88	0	0
	1983	55	2,627	3	238	2	16	5	854
Ogemaw	1981	104	4,915	2	420	2	135	7	282
	1982	76	3,798	3	65	3	112	6	392
	1983	103	4,954	0	0	3	2,113	5	954
Ontonagon	1981	30	973	1	78,000	1	48	0	0
	1982	18	574	0	0	1	25	0	0
	1983	41	1,188	1	30	0	0	0	0

TABLE XIV-14. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1981, 1982 AND 1983 (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)	Number of building	Value ($1000)
Osceola	1981	99	2,790	7	787	2	150	0	0
	1982	47	1,230	2	646	0	0	4	227
	1983	88	2,818	4	188	0	0	5	54
Oscoda	1981	45	2,191	0	0	1	541	0	0
	1982	45	2,251	0	0	0	0	0	0
	1983	48	2,310	1	373	0	0	0	0
Otsego	1981	112	5,114	3	142	0	0	1	1,218
	1982	68	2,914	1	65	1	70	1	15
	1983	122	5,283	1	80	1	53	0	0
Ottawa	1981	779	26,448	21	10,041	6	3,132	34	2,813
	1982	397	16,946	26	3,714	7	462	29	1,534
	1983	782	34,935	33	6,872	10	2,544	21	5,440
Presque Isle	1981	57	2,410	0	0	0	0	2	592
	1982	102	3,182	0	0	0	0	1	100
	1983	130	5,448	0	0	0	0	0	0
Roscommon	1981	116	3,417	4	47	3	86	5	235
	1982	113	3,307	1	373	3	490	5	68
	1983	151	4,180	0	0	0	0	6	504
Saginaw	1981	243	9,134	14	729	20	3,467	17	1,026
	1982	254	7,385	3	287	4	707	21	2,779
	1983	213	8,239	12	959	8	1,318	24	2,628
St Clair	1981	185	8,238	16	2,911	4	278	10	2,072
	1982	182	7,029	14	1,510	9	782	9	526
	1983	282	12,605	12	962	12	2,401	13	756
St. Joseph	1981	133	5,133	7	1,131	1	25	10	2,014
	1982	140	4,792	7	674	2	344	7	487
	1983	124	4,884	12	552	2	160	5	1,345
Sanilac	1981	103	3,952	1	120	1	84	8	536
	1982	63	2,275	0	0	0	0	10	583
	1983	114	4,020	1	14	1	80	12	926
Schoolcraft	1981	31	636	0	0	1	9	1	320
	1982	64	1,284	1	38	1	30	0	0
	1983	92	3,063	0	0	0	0	0	0

TABLE XIV-14. RESIDENTIAL, INDUSTRIAL, OFFICE, AND MERCANTILE CONSTRUCTION AUTHORIZED BY BUILDING PERMITS AND PUBLIC CONTRACTS IN MICHIGAN, BY COUNTY: 1981, 1982 AND 1983 (cont.)

		Residential		Industrial[a]		Offices[b]		Mercantile[c]	
County	Year	Number of dwellings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)	Number of buildings	Value ($1000)
Shiawassee	1981	126	4,700	3	45	1	66	2	472
	1982	52	2,280	5	461	0	0	0	0
	1983	51	2,343	4	89	0	0	2	9
Tuscola	1981	134	4,907	2	315	3	159	2	135
	1982	91	3,297	2	622	1	30	3	119
	1983	98	4,299	8	220	2	170	3	802
Van Buren	1981	167	5,311	2	1,834	4	257	1	1,500
	1982	75	3,109	2	239	1	100	3	36
	1983	211	8,031	2	137	2	77	7	505
Washtenaw	1981	275	20,591	14	5,361	15	5,783	14	2,871
	1982	215	18,875	17	3,807	6	7,042	10	1,938
	1983	345	29,355	18	7,436	13	14,950	4	1,789
Wayne	1981	1,887	79,359	54	19,341	38	15,095	88	16,539
	1982	1,664	87,445	39	159,040	20	12,811	63	14,056
	1983	1,565	82,450	52	19,188	37	10,783	91	21,482
Wexford	1981	58	2,068	4	2,148	5	865	2	702
	1982	58	1,693	5	263	0	0	4	564
	1983	89	2,782	0	0	1	32	1	56
MICHIGAN	1981	18,917	821,809	634	366,920	459	211,922	787	148,963
	1982	14,377	593,229	479	3,122,432	310	121,037	620	71,299
	1983	21,683	1,015,935	630	158,185	438	209,547	776	117,248

SOURCE: Bureau of the Census, special release.

a. Includes plants processing, producing, and assembling goods and materials together with affiliated buildings such as warehouses, garages, and administrative buildings. Newspaper and printing plants, central bakeries, laundry and dry cleaning plants, and ice plants fall within this definition.

b. Includes banks and professional buildings. Also the administration buildings of labor unions, chambers of commerce, and trade associations, and public administration buildings such as post offices, court houses, city halls, and federal offices.

c. Includes buildings used in buying, selling, distributing, and storing merchandise and materials or performing consumer services, that is, stores, auto and other showrooms, commercial warehouses, grain elevators, garages for storing commercial vehicles, restaurants, taverns, night clubs, bakery shops, laundry and dry cleaning shops, laundromats, frozen food lockers, beauty and barber shops, and animal hosptials.

XV. MANUFACTURING

The ranking of Michigan counties according to the relative importance of manufacturing (Table XV-7) was developed on the basis of personal income accounts and employment statistics prepared by the Bureau of Economic Analysis, U.S. Department of Commerce. Personal income is discussed in the narrative material introducing Chapter VI. By and large, the BEA income and employment statistics for manufacturing are consistent with the employment figures released by the Michigan Employment Security Commission since they are based on the same monthly reports from employers.

The production of motor vehicles is of special interest because of the great importance of this industry to Michigan. The Automobile Manufacturers Association publishes a wealth of information on the industry, and Automotive News and Ward's Communications, Inc., in Detroit are leading sources of regional statistics about the industry. R.L. Polk & Company, also in Detroit, compiles information about new car and truck sales and registrations. Some of these data are reproduced in chapter XVI.

Current Industrial Reports, published by the Bureau of the Census, contains current information about production and shipments of a great variety of manufactured items. A few of the series give details by states.

The American Iron and Steel Institute monitors monthly steel production in the United States and various centers. Its Annual Statistics Report and Iron and Steel Works Directory for the United States and Canada provide detailed information on the steel industry.

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TABLE XV-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF PRODUCTION WORKERS IN MICHIGAN AND THE UNITED STATES MANUFACTURING ESTABLISHMENTS: 1956-1983

	Michigan				United States			
	Employment	Weekly		Hourly	Employment	Weekly		Hourly
Year	(000)	Hours	Earnings	earnings	(000)	Hours	Earnings	earnings
1956	1,199.7	40.8	94.98	2.33	17,243	40.4	78.78	1.95
1957	1,154.0	40.0	97.64	2.44	17,174	39.8	81.19	2.04
1958	1,007.4	39.5	99.70	2.52	15,945	39.2	82.32	2.10
1959	952.8	40.9	108.71	2.66	16,675	40.3	88.26	2.19
1960	967.6	40.8	112.00	2.75	16,796	39.7	89.72	2.26
1961	879.4	40.1	112.32	2.80	16,326	39.8	92.34	2.32
1962	943.7	41.8	121.43	2.91	16,853	40.4	96.56	2.39
1963	980.0	42.5	128.27	3.02	16,995	40.5	99.23	2.45
1964	1,022.8	43.5	135.11	3.11	17,274	40.7	102.97	2.53
1965	1,102.6	44.6	143.79	3.22	18,062	41.2	107.53	2.61
1966	1,169.0	43.3	145.10	3.35	19,214	41.4	112.19	2.71
1967	1,138.5	42.0	145.78	3.47	19,447	40.6	114.49	2.82
1968	1,162.0	43.3	164.15	3.79	19,781	40.7	122.51	3.01
1969	1,192.8	42.0	166.78	3.97	20,167	40.6	129.51	3.19
1970	1,081.1	40.6	168.33	4.15	19,367	39.8	133.33	3.35
1971	1,059.2	41.0	188.19	4.59	18,623	39.9	142.44	3.57
1972	1,097.4	42.8	211.52	4.94	19,151	40.5	154.71	3.82
1973	1,178.8	43.4	228.63	5.27	20,154	40.7	166.46	4.09
1974	1,114.0	41.2	232.19	5.63	20,077	40.0	176.80	4.42
1975	983.7	40.8	250.76	6.15	18,323	39.5	190.79	4.83
1976	1,061.7	42.7	290.97	6.81	18,997	40.1	209.32	5.22
1977	1,128.4	43.3	326.27	7.54	19,682	40.3	228.90	5.68
1978	1,179.6	43.0	349.50	8.13	20,505	40.4	249.27	6.17
1979	1,160.1	41.2	359.72	8.73	21,040	40.2	269.34	6.70
1980	998.9	40.1	381.87	9.52	20,285	39.7	288.62	7.27
1981	979.0	40.5	426.27	10.53	20,173	39.8	318.00	7.99
1982	876.9	40.2	449.33	11.18	18,853	38.9	330.65	8.50
1983	880.8	42.5	494.02	11.62	18,678	40.1	354.48	8.84

SOURCE: Michigan Employment Security Commission Special release, and Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C.: Monthly), March 1984, Tables B-1 and C-1.

TABLE XV-2. EARNINGS IN MANUFACTURING ESTABLISHMENTS LOCATED IN MICHIGAN, AND THE UNITED STATES BY MAJOR INDUSTRY GROUP: 1977 AND 1982

(In thousands of dollars)

Industry group		1977[a]	1982[a]
Food & kindred products	Michigan	833,208	1,111,199
	U.S.	24,152,000	34,981,000
Textile mill products	Michigan	59,141	51,965
	U.S.	9,378,000	11,167,000
Apparel & other fabricated textile products	Michigan	396,967	388,145
	U.S.	10,978,000	13,785,000
Paper & allied products	Michigan	424,809	532,595
	U.S.	11,584,000	17,285,000
Printing, publishing, & allied products	Michigan	477,905	688,390
	U.S.	15,923,000	25,906,000
Chemicals & allied products	Michigan	953,598	307,448
	U.S.	20,581,000	32,628,000
Petroleum refining & related industries	Michigan	72,103	99,510
	U.S.	5,442,000	9,296,000
Rubber & miscellaneous plastic products	Michigan	471,010	654,401
	U.S.	9,908,000	14,511,000
Leather and leather products	Michigan	41,771	51,293
	U.S.	2,270,000	2,893,000
TOTAL nondurable goods	Michigan	3,730,693	4,884,961
	U.S.	111,353,000	164,501,000
Lumber & wood products excl. furniture	Michigan	173,337	175,013
	U.S.	9,577,000	10,953,000
Furniture & fixtures	Michigan	302,469	530,120
	U.S.	5,120,000	7,007,000
Primary metal industries	Michigan	2,135,275	1,761,556
	U.S.	24,573,000	28,752,000
Fabricated metal products	Michigan	2,565,081	2,531,726
	U.S.	25,078,000	33,972,000
Machinery, except electrical	Michigan	2,956,422	3,871,917
	U.S.	37,536,000	59,416,000
Electrical machinery	Michigan	709,553	777,566
	U.S.	28,196,000	47,433,000
Transportation equipment excl. motor vehicle	Michigan	245,510	484,838
	U.S.	17,894,000	32,063,000
Motor vehicles & equipment	Michigan	10,459,935	11,335,028
	U.S.	22,405,000	24,344,000
Stone, glass, and clay	Michigan	402,035	431,224
	U.S.	10,407,000	13,556,000
Instruments	Michigan	164,743	294,733
	U.S.	9,517,000	17,557,000
Miscellaneous manufacturing	Michigan	130,451	140,173
	U.S.	5,018,000	6,752,000
TOTAL durable goods	Michigan	20,244,811	22,333,894
	U.S.	195,321,000	281,815,000
TOTAL manufacturing	Michigan	23,975,504	27,218,855
	U.S.	306,674,000	446,316,000

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

a: Estimates based on 1972 Standard Industrial Classification. Estimates have been revised to reflect the 1980 Comprehensive NIPA Revisions.

TABLE XV-3. WEEKLY HOURS AND EARNINGS OF MANUFACTURING PRODUCTION WORKERS IN SELECTED MICHIGAN LABOR MARKETS: 1981-1983

Area	Average weekly earnings			Average weekly hours			Average hourly earnings		
	1981	1982	1983	1981	1982	1983	1981	1982	1983
Ann Arbor	$470.56	$482.35	$515.97	42.2	41.6	43.2	$ 1.14	$ 11.61	$ 11.94
Battle Creek	423.38	452.89	490.90	40.9	39.4	41.1	10.36	11.49	11.95
Bay City	378.54	388.32	431.45	40.7	40.2	42.3	9.31	9.67	10.21
Benton Harbor	339.53	350.14	388.90	40.7	39.0	42.1	8.33	8.97	9.23
Detroit	457.16	488.68	526.53	41.0	41.2	42.8	11.15	11.85	12.29
Flint	492.59	519.09	595.76	40.6	39.6	44.6	12.14	13.10	13.33
Grand Rapids	347.83	364.49	411.20	9.8	38.9	41.3	8.73	9.37	9.97
Jackson	399.24	399.25	404.22	43.0	40.5	41.5	9.27	9.80	9.74
Kalamazoo-Portage	401.50	402.68	453.57	40.3	39.5	41.6	9.97	10.20	10.90
Lansing-East Lansing	470.22	478.19	570.26	39.0	39.1	43.4	12.07	12.24	13.13
Muskegon-Muskegon Heights-Norton Shores	360.32	371.07	416.07	40.3	38.3	40.0	8.95	9.69	10.41
Saginaw	497.31	502.65	581.57	40.4	39.3	42.7	12.31	12.80	13.61
Upper Peninsula	303.62	336.19	345.62	40.0	39.9	40.5	7.59	8.43	8.54
Michigan	381.87	426.27	494.02	40.5	40.2	42.5	10.53	11.18	11.62

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics Employment and Earnings (Washington, D.C.: monthly).

NOTE: Dollar figures include cash earnings, before payroll deductions, and exclude fringe benefits such as company paid health and welfare premiums and employer contributions to Social Security Trust Funds.

TABLE XV-4. HOURS AND EARNINGS OF MANUFACTURING PRODUCTION WORKERS IN MICHIGAN AND THE UNITED STATES, BY INDUSTRY GROUP: 1983

Industry group	Michigan Average weekly hours	 Average hourly earnings	 Average weekly earnings	United States Average weekly hours	 Average hourly earnings	 Average weekly earnings
Durable goods	42.8	$ 12.10	$ 517.53	40.7	$ 9.40	$ 382.58
Lumber and wood products	41.8	7.30	304.93	40.0	7.79	311.60
Furniture and fixtures	40.8	9.14	372.67	39.4	6.62	260.83
Primary metal products	41.4	12.22	505.36	40.5	11.33	458.87
Fabricated metal products	42.3	11.38	481.47	40.6	9.14	371.08
Nonelectrical machinery	41.2	11.62	479.21	40.5	9.63	390.02
Electrical machinery	41.9	10.04	420.47	40.5	8.67	351.14
Transportation equipment	44.2	13.32	588.29	42.1	11.68	491.73
Motor vehicle and equipment	44.3	13.45	596.44	43.3	12.14	525.66
Nondurable goods	41.5	9.83	407.71	39.4	8.07	317.96
Food and kindred products	41.4	9.87	408.36	39.5	8.17	322.72
Textile mill products & apparel	42.4	11.81	500.60	40.4	6.18	249.67
Paper and allied products	44.5	10.63	472.58	42.6	9.93	423.02
Printing and publishing	37.6	8.91	335.59	37.6	9.12	342.91
Chemicals and allied products	41.1	11.41	457.38	41.6	10.59	440.54
TOTAL	42.5	11.62	494.02	40.1	8.84	354.48

SOURCE: Bureau of Labor Statistics, Employment and Earnings (Washington, D.C.: March 1984), vol. 30, no. 3, Table C-2; and Michigan Employment Security Commission, special release.

TABLE XV-6. WEEKLY EARNINGS OF MANUFACTURING PRODUCTION WORKERS IN MICHIGAN AND THE UNITED STATES, MONTHLY: 1971-1983

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual average
						Michigan							
1971	187.86	188.78	186.71	179.98	189.07	192.45	182.24	182.21	178.33	190.69	190.69	208.36	180.19
1972	199.36	201.43	204.22	206.76	207.95	209.09	214.03	206.29	215.26	215.24	219.64	234.09	211.52
1973	225.67	228.97	223.55	232.95	228.07	230.43	227.24	218.13	226.44	228.30	223.34	235.86	228.63
1974	220.53	220.52	223.96	206.93	231.70	235.44	235.63	234.89	244.68	248.09	234.65	247.33	232.03
1975	230.80	229.38	233.05	237.17	238.08	245.19	249.78	252.51	261.62	261.79	262.96	291.71	290.18
1976	270.80	278.94	284.99	267.03	292.61	298.56	292.64	290.70	299.28	289.29	302.93	323.83	290.97
1977	308.48	302.02	318.30	318.21	322.99	330.66	327.34	318.33	331.43	338.39	339.78	356.85	326.27
1978	326.92	323.23	336.22	340.52	340.33	344.23	345.86	340.26	361.00	367.92	371.25	394.24	349.50
1979	363.89	369.71	374.54	320.15	369.50	363.74	361.15	348.75	354.80	365.15	347.82	380.77	359.72
1980	362.17	365.20	375.50	367.60	362.24	369.57	69.25	371.18	386.55	407.85	407.46	432.00	381.87
1981	419.01	398.14	422.52	420.88	437.09	441.60	423.64	426.77	413.31	438.41	431.40	443.67	426.27
1982	425.24	440.32	443.43	449.72	460.08	472.97	461.20	447.94	431.9	441.31	454.00	466.11	449.33
1983	468.59	472.71	476.28	488.02	483.84	493.49	489.86	482.99	511.00	508.70	520.19	524.35	494.02
						United States							
1971	137.86	137.94	139.74	139.48	141.65	143.51	142.09	142.09	143.32	144.00	145.12	150.22	142.44
1972	148.06	149.20	151.13	153.09	153.50	155.04	153.52	155.09	158.69	158.30	159.92	163.58	154.71
1973	159.60	161.60	162.80	164.02	164.84	166.05	166.05	165.65	170.15	169.31	171.37	174.69	166.46
1974	169.60	170.02	171.25	166.96	175.71	178.16	177.60	179.25	183.37	184.06	183.02	186.73	176.80
1975	181.02	180.95	183.44	184.78	186.03	189.60	188.94	192.15	197.38	196.80	198.90	205.73	190.79
1976	201.60	202.40	204.11	199.92	207.55	209.79	209.32	210.53	214.13	213.33	216.81	222.22	209.32
1977	215.05	218.65	221.90	222.96	226.24	230.52	228.17	229.31	235.65	236.29	238.10	243.72	228.90
1978	234.02	236.81	242.80	244.02	245.23	249.29	249.05	249.27	256.00	257.00	261.35	268.27	249.43
1979	260.65	262.51	266.34	254.80	265.86	269.47	268.13	268.00	274.04	274.85	277.55	285.48	269.34
1980	277.41	278.60	281.39	279.74	280.60	284.07	282.85	288.01	295.71	298.50	305.52	314.16	288.62
1981	308.43	306.13	311.62	312.84	317.59	320.39	317.59	320.40	322.32	323.95	325.54	329.97	318.00
1982	312.38	326.93	327.7	325.85	329.55	334.05	332.60	331.89	334.15	333.84	338.37	344.60	330.65
1983	341.43	339.50	346.10	349.05	350.32	355.04	354.40	353.36	363.12	363.04	366.38	372.86	354.48^p

SOURCE: Michigan Employment Security Commission, special release and Bureau of Labor Statistics, Employment and Earnings (Washington, monthly), Table C-1.

TABLE XV-5. WEEKLY HOURS OF MANUFACTURING PRODUCTION WORKERS IN MICHIGAN AND THE UNITED STATES, MONTHLY: 1971-1983

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual average
						Michigan							
1971	41.7	41.6	41.0	39.4	41.3	41.9	40.0	40.1	38.7	41.4	41.4	43.4	41.0
1972	41.3	41.6	41.9	42.3	42.5	42.9	42.5	42.1	43.4	43.3	43.7	45.2	42.8
1973	43.7	44.1	43.4	44.6	43.8	44.0	43.4	41.9	43.0	43.1	42.1	43.5	43.4
1974	40.9	40.8	41.2	38.6	41.8	41.9	41.8	41.5	42.2	42.2	40.2	41.8	41.2
1975	39.8	39.5	39.4	39.8	39.7	40.3	40.7	40.8	41.6	41.0	41.1	44.4	40.7
1976	41.3	42.2	42.6	40.7	43.1	43.7	43.2	42.6	43.0	42.0	43.7	44.1	42.7
1977	42.2	42.0	43.2	43.2	43.6	44.1	43.5	42.5	43.5	43.2	43.4	45.2	43.3
1978	41.8	41.6	42.5	42.8	42.6	42.9	42.9	42.5	43.4	43.5	43.6	45.9	43.0
1979	42.5	42.9	43.1	37.3	42.2	41.8	41.1	40.5	40.6	41.0	39.2	42.0	41.2
1980	39.9	39.8	40.2	39.6	39.4	39.4	39.0	39.4	40.0	40.9	40.8	42.3	40.1
1981	41.1	39.2	41.1	40.8	41.8	41.8	40.3	40.6	38.6	40.3	39.7	40.5	40.5
1982	38.8	40.1	39.9	40.4	40.9	41.6	40.6	40.1	38.2	39.8	40.7	41.3	40.2
1983	41.1	41.4	41.7	42.4	42.1	42.4	42.1	42.1	43.5	43.3	43.8	43.8	42.5
						United States							
1971	39.5	39.3	39.7	39.4	39.9	40.2	39.8	39.8	39.7	40.0	40.2	40.6	39.9
1972	39.8	40.0	40.3	40.5	40.5	40.8	40.4	40.6	40.9	40.8	40.9	41.1	40.5
1973	39.9	40.5	40.7	40.7	40.7	40.9	40.6	40.5	41.0	40.7	40.9	41.2	40.7
1974	40.0	40.1	40.2	39.1	40.3	40.4	40.0	40.1	40.3	40.1	39.7	39.9	40.0
1975	38.7	38.5	38.7	38.9	39.0	39.5	39.2	39.7	40.2	40.0	40.1	40.9	39.5
1976	40.0	40.0	40.1	39.2	40.3	40.5	40.1	40.1	40.1	40.1	40.3	40.7	40.1
1977	39.1	39.9	40.2	40.1	40.4	40.8	40.1	40.3	40.7	40.6	40.7	41.1	40.3
1978	39.2	39.6	40.4	40.4	40.4	40.8	40.3	40.4	40.7	40.6	40.9	41.4	40.4
1979	40.1	40.2	40.6	38.9	40.1	40.4	39.9	40.0	40.3	40.3	40.4	40.9	40.2
1980	39.8	39.8	39.8	39.4	39.3	39.4	38.8	39.4	39.8	39.8	40.2	40.8	39.7
1981	39.9	39.5	39.9	39.7	40.1	40.2	39.6	39.9	39.5	39.7	39.7	39.9	39.8
1982	37.1	39.2	39.1	38.7	39.0	39.3	38.9	39.0	38.9	39.0	39.3	39.7	38.9
1983	39.2	38.8	39.6	39.8	39.9	40.3	40.0	40.2	40.8	40.7	40.8^p	41.2^p	40.1^p

SOURCE: Michigan Employment Security Commission, special release and Bureau of Labor Statistics, Employment and Earnings (Washington, D.C.: monthly), Table C-1.

TABLE XV- 7. RANKING OF MICHIGAN COUNTIES ACCORDING TO EARNINGS IN MANUFACTURING AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

County	Percentage		County	Percentage	
	1972	1982		1972	1982
Genesee	55.85	55.15	Livingston	24.94	26.08
Midland	65.99	51.96	Monroe	40.85	25.54
St. Joseph	51.95	49.09	Benzie	17.39	24.39
Ottawa	46.88	48.84	Ontonagon	10.64	24.13
Macomb	54.50	48.23	Eaton	29.55	23.55
Saginaw	51.81	46.79	Dickinson	19.36	22.18
Lenawee	50.91	46.72	Alcona	12.55	22.02
Allegan	40.10	46.36	Schoolcraft	15.69	21.66
Muskegon	48.62	45.66	Gladwin	22.04	21.46
Berrien	53.96	44.45	Otsego	29.55	20.95
Montcalm	42.50	43.29	Iron	6.01	20.85
Hillsdale	41.86	43.09	Ogemaw	14.26	20.68
Osceola	44.98	42.92	Lapeer	25.78	20.27
Calhoun	44.30	42.43	Grand Traverse	14.28	19.52
Manistee	43.62	42.38	Clinton	18.65	19.11
Wayne	42.32	41.40	Huron	22.04	17.98
Kalamazoo	41.98	40.65	Tuscola	24.60	17.73
Delta	29.36	40.58	Clare	16.34	15.86
Alger	37.74	39.39	Montmorency	32.82	15.21
Cass	43.55	39.24	Arenac	15.01	15.06
Menominee	40.89	39.02	Mecosta	16.93	14.11
Barry	44.66	39.01	Oceana	11.54	13.93
Washtenaw	43.02	38.71	Kalkaska	17.88	13.68
Kent	37.11	36.92	Emmet	14.10	12.61
Bay	35.57	36.03	Gogebic	25.31	11.41
Ionia	33.17	35.69	Missaukee	1.34	11.00
Newaygo	33.71	35.15	Oscoda	13.18	10.94
Mason	27.50	34.89	Crawford	16.92	10.85
Charlevoix	33.81	33.64	Isabella	6.13	10.81
Gratiot	33.28	33.04	Iosco	8.00	10.56
Ingham	37.30	32.44	Roscommon	8.11	7.84
Alpena	37.21	32.41	Chippewa	2.40	6.86
Jackson	39.21	32.12	Leelanau	7.07	5.60
Van Buren	36.69	31.85	Houghton	8.84	4.91
Branch	34.01	31.33	Presque Isle	2.89	4.16
Sanilac	33.11	30.57	Mackinac	3.94	3.52
Wexford	30.59	30.28	Marquette	4.20	3.10
Antrim	40.43	30.18	Luce	8.07	2.68
Shiawassee	36.76	29.98	Keweenaw	30.20	(D)
Cheboygan	29.81	29.33	Lake	11.94	(D)
Baraga	44.85	29.14			
Oakland	34.78	28.42	Michigan	41.63	38.30
St. Clair	30.63	26.67	United States	26.18	24.41

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XV-8. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN MANUFACTURING: 1981-1982

	Percentage change			Percentage change	
County	1972-1982	1981-1982	County	1972-1982	1981-1982
Grand Traverse	321	21	Ingham	107	-6
Ontonagon	215	21	Monroe	47	-6
Clare	114	19	Berrien	38	-6
Presque Isle	195	19	Barry	73	-6
Schoolcraft	227	18	Macomb	74	-6
Iron	644	15	Emmet	95	-7
Leelanau	48	15	Shiawassee	47	-7
Montmorency	-29	12	Oakland	109	-7
Newaygo	112	11	Wayne	61	-7
Osceola	104	7	Branch	93	-8
Isabella	376	6	Antrim	51	-9
Livingston	184	6	Washtenaw	136	-9
Gratiot	90	4	Clinton	126	-9
St. Clair	99	4	Van Buren	77	-9
Ottawa	168	4	Huron	67	-10
Allegan	166	3	Arenac	122	-10
Lapeer	73	3	Mackinac	91	-11
Chippewa	298	2	Mason	103	-11
Missaukee	1,738	2	Montcalm	132	-11
Iosco	142	1	Gogebic	-20	-11
Kalamazoo	139	0	Gladwin	111	-12
Alger	109	0	Menominee	112	-12
Hillsdale	106	-1	Genesee	100	-13
Midland	100	-2	Ionia	124	-13
Benzie	194	-2	Oscoda	51	-13
Alcona	247	-2	Jackson	55	-14
Delta	220	-2	Mecosta	88	-15
Kalkaska	362	-2	Saginaw	74	-15
Cheboygan	115	-2	Otsego	101	-16
St. Joseph	97	-3	Charlevoix	128	-16
Dickinson	166	-3	Eaton	70	-17
Marquette	65	-3	Baraga	0	-18
Tuscola	53	-3	Alpena	62	-18
Wexford	165	-4	Ogemaw	236	-18
Kent	140	-4	Manistee	97	-20
Bay	109	-5	Houghton	26	-26
Sanilac	58	-5	Roscommon	127	-39
Calhoun	82	-5	Crawford	70	(D)
Cass	75	-5	Keweenaw	(D)	(D)
Muskegon	89	-5	Lake	(D)	(D)
Luce	-21	-5			
Oceana	171	-5	Michigan	85	-7
Lenawee	50	-5	United States	128	-1

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XV- 9. RANKING OF MICHIGAN COUNTIES ACCORDING TO EARNINGS IN NON-DURABLE GOODS MANUFACTURING AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

	Percentage			Percentage	
County	1972	1982	County	1972	1982
Midland	65.22	51.32	Branch	3.42	4.37
Alger	31.93	35.78	Oceana	4.85	4.22
Allegan	16.29	29.81	Leelanau	2.79	4.21
Newaygo	30.19	28.44	Tuscola	3.70	4.03
Osceola	22.20	27.26	Huron	5.86	3.96
Manistee	29.15	26.05	Washtenaw	3.89	3.84
Delta	14.23	25.41	Saginaw	2.81	3.46
Calhoun	20.06	25.24	Shiawassee	8.78	3.42
Kalamazoo	22.50	24.07	Gladwin	0.97	3.16
Cheboygan	17.06	20.97	Ogemaw	0.38	3.07
Gratiot	16.83	19.27	Monroe	8.68	2.98
Benzie	12.01	18.59	Antrim	1.23	2.90
Schoolcraft	10.82	18.20	Gogebic	3.35	2.39
Mason	8.73	16.10	Arenac	1.26	2.30
St. Joseph	16.84	15.08	Oakland	2.39	2.28
Sanilac	12.63	14.49	Emmet	1.13	2.19
Lenawee	10.23	13.85	Ingham	2.44	1.92
Hillsdale	5.45	12.02	Houghton	3.48	1.83
Wexford	8.15	11.73	Missaukee	0.69	1.82
St. Clair	11.28	11.54	Iron	1.02	1.76
Ontonagon	4.72	11.11	Roscommon	1.58	1.73
Menominee	8.90	11.08	Mackinac	1.59	1.49
Baraga	25.96	11.00	Marquette	2.00	1.46
Lapeer	7.57	10.17	Genesee	1.93	1.37
Kent	8.96	10.07	Isabella	1.33	1.33
Grand Traverse	6.72	10.03	Chippewa	1.17	1.13
Bay	5.60	9.87	Alcona	(D)	0.61
Van Buren	11.27	9.02	Clinton	0.64	0.42
Montcalm	6.37	8.46	Keweenaw	0.00	0.00
Ottawa	9.03	8.17	Lake	(D)	0.00
Berrien	9.71	7.68	Charlevoix	2.72	(D)
Macomb	7.29	7.24	Crawford	0.92	(D)
Clare	3.82	7.06	Iosco	0.36	(D)
Muskegon	6.43	6.75	Kalkaska	(D)	(D)
Jackson	7.04	6.70	Luce	0.56	(D)
Livingston	3.68	5.72	Mecosta	12.07	(D)
Ionia	14.01	5.53	Montmorency	6.27	(D)
Wayne	5.89	5.41	Oscoda	(D)	(D)
Alpena	11.84	5.12	Otsego	1.21	(D)
Dickinson	2.54	5.11	Presque Isle	0.46	(D)
Cass	2.57	5.05			
Barry	1.72	4.56	Michigan	6.81	6.87
Eaton	2.17	4.40	United States	9.82	9.00

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XV-10. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN NON-DURABLE GOODS MANUFACTURING: 1981-1982

	Percentage change			Percentage change	
County	1972-1982	1981-1982	County	1972-1982	1981-1982
Grand Traverse	360	59	Arenac	304	1
Clare	307	51	Benzie	224	1
Delta	313	30	Alpena	-20	1
Schoolcraft	298	21	Gratiot	119	0
Bay	264	18	Alger	125	0
Hillsdale	341	15	Mason	194	0
Chippewa	34	15	Barry	425	0
Eaton	332	15	Kent	171	-1
Ionia	-18	14	Houghton	19	-1
Newaygo	91	12	Midland	100	-1
Emmet	323	12	Sanilac	96	-2
Osceola	162	11	Baraga	-35	-3
Clinton	42	11	Wayne	51	-3
Allegan	320	10	Iron	270	-3
Oakland	144	9	Jackson	79	-4
Kalamazoo	165	9	Ontonagon	227	-5
Ottawa	132	8	Monroe	-19	-6
Cheboygan	168	7	Livingston	323	-7
Menominee	178	7	Lenawee	122	-8
Mackinac	101	7	Manistee	81	-13
Missaukee	493	7	Branch	167	-17
Calhoun	140	6	Shiawassee	-30	-22
St. Joseph	86	6	Huron	38	-23
Muskegon	111	6	Ogemaw	1,765	-37
St. Clair	133	6	Gogebic	27	-39
Washtenaw	158	5	Alcona	(D)	(D)
Lapeer	195	5	Cass	282	(D)
Saginaw	137	4	Charlevoix	(D)	(D)
Genesee	44	4	Crawford	(D)	(D)
Isabella	170	3	Iosco	(D)	(D)
Van Buren	63	3	Kalkaska	(D)	(D)
Antrim	375	3	Keweenaw	(NA)	(NA)
Berrien	33	2	Lake	(D)	(NA)
Montcalm	202	2	Leelanau	182	(D)
Tuscola	132	2	Luce	(D)	(D)
Gladwin	610	2	Mecosta	(D)	(D)
Oceana	95	2	Montmorency	(D)	(D)
Marquette	63	2	Oscoda	(D)	(D)
Wexford	285	2	Otsego	(D)	(D)
Ingham	88	1	Presque Isle	(D)	(D)
Macomb	95	1			
Roscommon	158	1	Michigan	103	2
Dickinson	367	1	United States	124	4

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

(NA) Not available.

TABLE XV-11. RANKING OF MICHIGAN COUNTIES ACCORDING TO EARNINGS IN DURABLE GOODS MANUFACTURING AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

	Percentage			Percentage	
County	1972	1982	County	1972	1982
Genesee	53.92	53.79	Osceola	22.78	15.66
Saginaw	48.99	43.34	Delta	15.13	15.17
Macomb	47.22	40.99	St. Clair	19.35	15.13
Ottawa	37.85	40.67	Huron	16.18	14.01
Muskegon	42.19	38.91	Gratiot	16.45	13.78
Berrien	44.25	36.77	Tuscola	20.90	13.69
Wayne	36.43	35.99	Kalkaska	(D)	13.66
Washtenaw	39.13	34.88	Ontonagon	5.92	13.02
Montcalm	36.13	34.83	Arenac	13.75	12.76
Barry	42.94	34.46	Oscoda	(D)	10.76
Cass	40.99	34.19	Emmet	12.97	10.42
St. Joseph	35.11	34.01	Lapeer	18.21	10.10
Lenawee	40.68	32.87	Oceana	6.68	9.72
Hillsdale	36.41	31.07	Grand Traverse	7.56	9.49
Ingham	34.87	30.52	Isabella	4.80	9.48
Ionia	19.16	30.16	Missaukee	0.65	9.18
Menominee	32.00	27.93	Gogebic	21.97	9.02
Alpena	25.37	27.29	Clare	12.52	8.80
Antrim	39.20	27.28	Cheboygan	12.76	8.36
Branch	30.59	26.96	Newaygo	3.52	6.71
Kent	28.16	26.85	Roscommon	6.54	6.11
Shiawassee	27.98	26.56	Benzie	5.39	5.80
Bay	29.97	26.16	Chippewa	1.23	5.73
Oakland	32.39	26.14	Alger	5.82	3.61
Jackson	32.17	25.42	Schoolcraft	4.88	3.46
Van Buren	25.43	22.83	Houghton	5.37	3.08
Monroe	32.17	22.56	Mackinac	2.35	2.02
Alcona	(D)	21.41	Marquette	2.20	1.64
Livingston	21.26	20.35	Leelanau	4.28	1.39
Eaton	27.39	19.15	Midland	0.77	0.64
Iron	4.99	19.10	Charlevoix	31.09	(D)
Mason	18.77	18.80	Crawford	16.01	(D)
Clinton	18.01	18.69	Iosco	7.64	(D)
Wexford	22.44	18.55	Keweenaw	30.20	(D)
Gladwin	21.07	18.29	Lake	(D)	(D)
Baraga	18.89	18.14	Luce	7.51	(D)
Ogemaw	13.88	17.61	Mecosta	4.86	(D)
Calhoun	24.23	17.19	Montmorency	26.56	(D)
Dickinson	16.81	17.06	Otsego	28.34	(D)
Kalamazoo	19.48	16.58	Presque Isle	2.44	(D)
Allegan	23.82	16.55			
Manistee	14.47	16.33	Michigan	34.82	31.43
Sanilac	20.48	16.08	United States	16.36	15.41

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XV-12. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN DURABLE GOODS MANUFACTURING: 1981-1982

	Percentage change			Percentage change	
County	1972-1982	1981-1982	County	1972-1982	1981-1982
Ontonagon	206	58	Emmet	75	-10
Iron	721	17	Kalamazoo	110	-10
Livingston	160	10	Washtenaw	133	-11
Gratiot	60	10	Bay	80	-11
Isabella	434	6	Arenac	105	-12
Schoolcraft	68	6	Genesee	102	-13
Newaygo	287	6	Van Buren	83	-13
Ottawa	176	3	Gladwin	88	-14
St. Clair	78	2	Ogemaw	194	-14
Clare	55	2	Montcalm	120	-14
Lapeer	22	1	Jackson	49	-16
Gogebic	-27	1	Saginaw	70	-16
Missaukee	3,046	1	Ionia	228	-17
Chippewa	550	0	Calhoun	35	-18
Osceola	47	0	Menominee	94	-18
Kalkaska	(D)	-2	Mason	60	-19
Grand Traverse	287	-3	Midland	109	-20
Shiawassee	71	-4	Cheboygan	43	-20
Lenawee	32	-4	Mackinac	85	-21
Dickinson	136	-4	Alpena	99	-21
Alger	24	-5	Eaton	49	-22
Kent	130	-5	Baraga	48	-25
Huron	77	-5	Manistee	129	-30
Tuscola	39	-5	Delta	132	-30
Monroe	65	-6	Houghton	30	-35
Branch	84	-6	Roscommon	120	-45
Ingham	109	-6	Alcona	(D)	(D)
Hillsdale	70	-7	Cass	62	(D)
Muskegon	86	-7	Charlevoix	(D)	(D)
St. Joseph	102	-7	Crawford	(D)	(D)
Wexford	121	-7	Iosco	(D)	(D)
Marquette	66	-7	Keweenaw	(D)	(D)
Allegan	60	-7	Lake	(D)	(D)
Barry	59	-7	Leelanau	-40	(D)
Sanilac	34	-7	Luce	(D)	(D)
Berrien	40	-8	Mecosta	(D)	(D)
Macomb	71	-8	Montmorency	(D)	(D)
Oakland	106	-8	Oscoda	(D)	(D)
Wayne	63	-8	Otsego	(D)	(D)
Oceana	226	-8	Presque Isle	(D)	(D)
Antrim	41	-10			
Clinton	129	-10	Michigan	81	-9
Benzie	125	-10	United States	130	-3

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XV-13. RAW STEEL PRODUCTION IN MICHIGAN AND THE UNITED STATES, BY MONTH: 1972-1983

(1,000 tons)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1972	779	734	797	792	840	705	680	799	748	828	823	854
1973	807	786	895	936	995	925	930	920	930	968	890	963
1974	935	824	916	841	871	864	919	864	837	949	824	815
1975	867	787	852	738	693	654	693	710	776	783	708	766
1976	818	823	859	821	966	927	888	896	805	833	904	849
1977	823	796	884	823	877	891	811	908	875	768	799	775
1978	772	741	912	807	902	909	978	940	950	1,035	920	926
1979	1,002	878	1,044	988	1,025	981	968	942	819	823	753	751
1980	839	810	828	803	585	365	437	452	546	737	760	706
1981	770	702	827	798	788	744	792	794	684	579	590	612
1982	500	451	544	592	617	570	597	550	478	413	360	448
1983	536	561	675	656	659	588	620	523	508	637	609	562
						United States						
1972	10,001	9,980	11,588	11,588	11,937	10,980	10,341	10,842	10,913	11,657	11,398	11,878
1973	12,372	11,626	13,088	12,789	13,174	12,488	12,290	12,181	12,229	12,876	12,587	12,722
1974	12,726	11,598	12,758	12,442	12,752	12,185	12,155	11,837	11,849	12,617	11,614	10,960
1975	11,584	10,862	11,980	10,667	9,864	8,744	8,370	8,648	9,295	9,214	8,709	8,846
1976	9,835	9,907	11,294	11,439	12,136	11,605	11,400	11,128	10,463	10,295	9,227	9,215
1977	9,089	8,859	11,049	11,167	12,201	11,384	10,319	10,392	10,050	10,442	9,748	10,031
1978	10,301	9,643	11,082	11,528	12,320	11,861	11,387	11,550	11,467	12,104	11,654	11,812
1979	11,105	10,562	12,576	12,196	12,789	12,230	11,821	11,309	10,541	10,810	9,997	9,996
1980	10,701	10,332	11,439	10,658	9,226	7,501	6,796	7,019	7,767	9,442	10,057	10,180
1981	10,590	10,028	11,744	11,243	11,374	10,451	10,160	10,120	9,618	9,003	7,962	7,671
1982	7,737	7,178	8,049	6,982	6,678	6,050	5,719	5,538	5,302	5,262	4,546	4,456
1983	5,570	5,676	7,127	7,292	7,412	6,993	6,921	7,020	7,134	7,692	6,263	6,991^{P}

SOURCE: American Iron and Steel Institute, special release.

TABLE XV-14. PRODUCTION OF RAW STEEL IN MICHIGAN AND THE UNITED STATES: 1951-1983

(000 short tons)

Year	Michigan	United States	Michigan as percentage of United States
1951	4,829	105,200	4.6
1952	4,552	93,200	4.9
1953	5,142	111,482	4.6
1954	4,224	88,316	4.8
1955	5,999	116,858	5.1
1956	6,231	114,999	5.4
1957	6,220	112,630	5.5
1958	4,567	85,149	5.4
1959	5,634	95,361	6.0
1960	6,529[a]	98,812	6.6
1961	6,644[a]	97,417	6.8
1962	7,126[a]	98,221	7.3
1963	8,447[a]	109,011	7.7
1964	9,435	126,460	7.5
1965	8,990	131,237	6.9
1966	10,004	132,902	7.5
1967	9,247	126,323	7.3
1968	9,220	127,509	7.2
1969	10,039	141,008	7.1
1970	9,581	130,940	7.3
1971	9,069	120,443	7.5
1972	9,380	133,241	7.0
1973	10,945	150,799	7.3
1974	10,459	145,720	7.2
1975	9,093	116,642	7.8
1976	10,382	128,000	8.1
1977	10,051	125,333	8.0
1978	10,789	137,031	7.9
1979	10,922	136,341	8.0
1980	7,877	111,835	7.0
1981	8,943	120,828	7.4
1982	6,075	74,577	8.1
1983[b]	7,230	83,379	8.7

SOURCE: Bureau of the Census, Current Industrial Reports, Iron and Steel Foundries and Steel Ingot Production (Washington, D.C.: 1983), M33A(82)-13, Table 7, and similar reports for previous years.

a. Includes Wisconsin.

b. Tonnage statistics released by the American Iron and Steel Institute.

TABLE XV-15. SHIPMENTS OF SELECTED STEEL MILL PRODUCTS INCLUDING INTERPLANT TRANSFERS, MICHIGAN AND THE UNITED STATES: 1971-1982

(000 short tons)

Year		Hot-rolled sheet and strip[a]	Steel pipe and tube	Cold-rolled sheet and strip	Cold-rolled bar and shape	Total[b]
1971	Michigan	n.a.	171	3,283	n.a.	8,750
	United States	32,632	8,626	17,274	1,585	108,329
1972	Michigan	n.a.	224	3,439	n.a.	9,000
	United States	36,564	8,708	18,080	1,907	114,498
1973	Michigan	5,566	279	3,896	n.a.	10,654
	United States	42,758	10,616	22,719	2,373	136,965
1974	Michigan	5,724	247	3,289	n.a.	10,138
	United States	41,382	11,790	20,938	2,503	137,786
1975	Michigan	4,828	241	2,386	141	8,110
	United States	1,131	9,903	14,783	1,639	99,862
1976	Michigan	5,816	279	3,057	163	9,619
	United States	37,602	7,915	20,265	1,739	112,257
1977	Michigan	5,603	229	2,944	165	9,343
	United States	37,525	9,170	19,490	1,919	112,075
1978	Michigan	6,110	248	3,173	171	10,287
	United States	38,903	10,400	19,734	2,112	120,890
1979	Michigan	n.a.	248	2,837	188	12,123
	United States	39,484	10,547	19,529	2,284	124,074
1980	Michigan	n.a.	182	2,176	n.a.	7,817
	United States	32,857	10,983	15,081	1,668	104,075
1981	Michigan	5,240	205	2,117	164	8,252
	United States	34,779	12,765	16,657	1,806	109,761
1982	Michigan	3,726	162	1,462	89	5,693
	United States	26,455	6,670	12,499	1,071	73,684

SOURCE: Bureau of the Census, Current Industrial Reports, Steel Mill Products (Washington, D.C., 1984), MA 33B(82)-1, Table 7; and similar reports for previous years.

a. Includes tin mill products.
b. Includes items not specified in other columns of this table.
n.a.: Data not available.

TABLE XV-16. MICHIGAN OIL REFINERIES: 1981

Company	Refinery location	Nominal capacity Bbls/day
Bay Refining, Dow Chemical Co.	Bay City	17,000
Crystal Refining Co.	Carson City	6,200
Lakeside Refining Co.	Kalamazoo	5,600
Total Petroleum, Inc.	Alma	42,500
Marathon Oil Co.	Detroit	68,500
Osceola Refining Co.	West Branch	12,500
Total capacity		152,300
Total average daily amount of crude refined		94,812
Michigan produced crude		61,743
Out-of-State produced crude		33,069

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1981, Annual Statistical Summary 36 (Lansing: 1983), Table 27.

TABLE XV-17. PRODUCTION OF INORGANIC CHEMICALS IN MICHIGAN AND THE UNITED STATES: 1967-1981

(In thousands of short tons)

Year	Chlorine gas		Sodium hydroxide		Hydrochloric acid	
	Michigan	United States	Michigan	United States	Michigan	United States
1967	589	7,680	687	8,398	126	1,630
1968	601	8,444	672	8,868	119	1,748
1969	627	9,376	672	9,917	139	1,911
1970	583	9,764	611	10,141	131	2,014
1971	502	9,352	522	9,667	140	2,099
1972	510	9,873	528	10,217	138	2,302
1973	533	10,402	584	10,734	130	2,516
1974	563	10,753	613	11,189	139	2,451
1975	445	9,167	484	9,635	101	2,009
1976	432	10,378	472	10,516	102	2,542
1977	367	10,573	408	11,000	71	2,668
1978	380	11,052	421	11,326	108	2,791
1979	466	12,291	513	12,759	181	3,090
1980	383	11,421	420	11,625	169	2,895
1981	438	10,545	370	10,633	107	2,443
1982	140	9,176	155	9,385	101	2,460

SOURCE: U. S. Department of Commerce, Bureau of the Census, *Current Industrial Reports*, Series 1928A, *Annual Summaries* for 1967 to 1982, tables 3 and 6. Monthly series for 1981, table 3 (Washington, D.C.: monthly).

TABLE XV-18. MANUFACTURING CAPACITY UTILIZATION RATES FOR SELECTED SMSA, MICHIGAN AND UNITED STATES: 1976-1982

SMSA	1976	1977	1978	1979	1980	1981	1982
Detroit							
Preferred rate[a]	94	93	90	72	60	51	52
Practical rate[b]	80	80	81	68	56	46	49
Grand Rapids							
Preferred rate	93	91	83	83	73	65	62
Practical rate	73	75	76	76	66	60	57
Lansing-East Lansing							
Preferred rate	95	97	100	96	54	41	88
Practical rate	92	108	100	95	50	38	86
Michigan							
Preferred rate	94	94	76	75	62	53	59
Practical rate	81	83	88	70	58	49	56
United States							
Preferred rate	93	93	81	79	75	72	64
Practical rate	74	76	74	74	69	66	58

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Industrial Reports: *Survey of Plant Capacity*, MQ-C1(82)-1, Tables 3 and 4, (Washington, D.C.: 1983), and similar tables for previous years.

[a] Ratio of actual operations to preferred level of operations.

[b] Ratio of actual operations to practical capacity.

[c] Withheld because the estimate did not meet publication standards due to the limited statistical reliability of the data.

TABLE XV-19. CAPITAL EXPENDITURES AND GROSS ANNUAL COSTS FOR POLLUTION ABATEMENT IN MANUFACTURING ESTABLISHMENTS IN MICHIGAN AND THE UNITED STATES: 1973-1981

(In millions of dollars)

	Capital expenditures			Annual operating costs		
Year	Air	Water	Solid waste	Air	Water	Solid waste
			Michigan			
1973	62.7	41.9	4.0	62.3	64.0	36.6
1974	52.8	42.9	10.2	65.1	78.4	36.4
1975	49.9	52.5	8.4	83.0	75.5	41.3
1976	45.7	57.2	3.8	91.7	93.1	52.0
1977	60.9	81.6	6.1	94.6	120.2	72.8
1978	87.9	73.2	9.7	108.9	134.0	85.1
1979	130.9	77.8	9.8	141.4	157.8	88.9
1980	83.6	66.3	13.6	135.3	168.2	109.3
1981	144.6	65.2	12.4	143.8	199.1	123.9
			United States			
1973	1,417.5	827.8	108.2	960.5	993.3	491.7
1974	1,947.5	1,008.8	144.7	1,210.7	1,261.4	630.7
1975	2,235.7	1,280.1	121.8	1,508.1	1,496.4	669.7
1976	1,797.8	1,599.2	134.8	1,888.2	1,824.0	827.1
1977	1,652.0	1,674.1	157.7	2,240.4	2,203.4	981.4
1978	1,853.6	1,246.5	178.9	2,527.4	2,529.9	1,218.2
1979	2,071.9	1,245.7	246.9	3,061.8	3,015.6	1,322.5
1980	2,105.5	1,146.5	251.0	3,297.8	3,193.1	1,650.6
1981	2,193.6	1,028.4	263.1	3,697.8	3,554.3	1,855.7

SOURCE: U. S. Department of Commerce, Bureau of the Census, *Current Industrial Reports, Pollution Abatement Costs and Expenditures, 1981* (Washington, D.C.).

TABLE XV-20. WINE SHIPMENTS BY WINERY, AND BEER SHIPMENTS BY BREWERY, IN MICHIGAN: 1982 AND 1983

Producer	1982	1983
Winery shipments (gallons)		
Boskydel	15,340.74	13,978.95
Bronte	217,973.29	134,623.00
Chateau Grand Traverse	53,743.88	20,197.40
Chi (Bridgeman)	--	13,320.64
Chi (Buchanan)	155,651.35	80,751.14
Fenn Valley	60,859.01	43,885.19
Fink	2,520.00	--
Frontenac	191,615.76	137,445.30
Good Harbor	18,819.08	19,794.81
Lakeside	65,135.91	149,680.88
Leelanau (Frank)	13,184.97	12,186.00
Leelanau (Omena)	41,046.12	42,138.00
Leelanau (T.C.)	20,277.34	15,642.00
L. Mawby	2,395.51	4,811.98
Milan	205,226.16	133,229.26
Parmenter	--	18,442.92
Peterson & Sons	--	258.16
St. Julian (Frank)	6,641.54	56,986.72
St. Julian (Paw Paw)	667,316.75	519,722.80
Warner	1,016,120.94	557,425.30
TOTAL	2,753,868.35	1,974,520.45
Brewery Shipments (barrels)		
Carling National Breweries		
Michigan Sales	692,257	895,415
Shipped-out	239,377	241,145
Total	931,634	1,136,560
Geyer Brothers Brewery		
Michigan Sales	2,646	2,892
Shipped-out	160	86
Total	2,806	2,978
The Real Ale Company		
Michigan Sales	132	281
Shipped-out	0	0
Total	132	281
The Stroh Brewery Company		
Michigan Sales	668,380	784,331
Shipped-out	4,745,694	4,184,206
Total	5,414,074	4,968,537
The Stroh Brewery-Goebel Division		
Michigan Sales	148,964	64,882
Shipped-out	266,791	118,466
Total	415,755	183,348
The Stroh Brewery - Schlitz Division		
Michigan Sales (only)	--	296,272
Total All Breweries		
Michigan Sales	1,512,379	2,044,073
Shipped-out	5,252,022	4,543,903
TOTAL	6,764,401	6,587,976

SOURCE: Michigan Liquor Control Commission, special release.

TABLE XV-21. COMMERCIAL WHEAT MILLING PRODUCTION IN MICHIGAN AND THE UNITED STATES: 1967-1982

Year	Wheat grd. for flour (1,000 bushels)		Wheat flour production: Total (1,000 cwt. sacks)		Wheat flour production: Daily (24 hour capacity cwt. sacks)		Average lbs. per cwt. sacks of flour
	Michigan	United States	Michigan	United States	Michigan	United States	
1967	16,966	549,801	7,453	245,240	33,870	1,132,923	n.a.
1968	17,483	569,649	7,561	254,185	31,429	1,001,526	n.a.
1969	17,861	567,956	7,740	254,094	32,129	1,013,322	n.a.
1970	16,506	563,714	7,275	253,094	34,656	987,962	n.a.
1971	16,003	555,092	7,120	249,810	34,029	972,736	133.3
1972	14,199	557,801	6,236	250,441	19,576	985,460	133.6
1973	9,351	567,287	4,117	254,661	18,486	979,794	133.7
1974	9,557	562,962	3,922	251,097	17,724	978,276	134.5
1975	8,397	582,675	3,739	258,985	19,485	991,008	134.9
1976	9,374	618,284	4,053	275,077	19,511	1,040,628	135.0
1977	9,147	618,125	4,153	275,784	20,049	1,072,143	134.5
1978	10,416	621,321	4,446	277,950	20,220	1,058,873	134.1
1979	10,196	636,375	4,429	284,051	20,449	1,054,589	134.4
1980	9,894	628,599	4,285	282,655	22,249	1,059,643	133.4
1981	10,834	634,381	4,741	283,966	23,109	1,062,950	134.0
1982	10,875	640,158	4,735	284,965	26,350	n.a.	134.8

Source: U.S. Department of Commerce, Bureau of the Census, Current Industrial Reports, Series M20 A-13, Annual Summaries, table 4 (Washington, D.C.: Annually).

n.a.: not available.

XVI. THE AUTOMOTIVE ECONOMY

The Motor Vehicle Manufacturers Association of the United States, Inc., is a source of data pertaining to production and shipments of motor vehicles in the United States and Canada as well as other countries. In Canada, the Automotive Parts Manufacturers Association, in Toronto, prepares analyses of North American vehicle production, sales, and employment.

Two Detroit organizations, Crain Communications, Inc., and Ward's Communications, Inc., publish weekly compilations of statistics as well as news items pertaining to vehicle production and sales in the United States, Canada, and other countries.

In Washington the U.S. International Trade Commission publishes monthly U.S. automobile economic indicators, and the International Trade Administration, in the U.S. Department of Commerce, publishes monthly Canada-U.S. automotive trade statistics. Statistics Canada, in Ottawa, publishes monthly data on automotive production, sales, and employment.

Passenger car and truck registration data are available in geographic as well as make and model detail from R.L. Polk and Company in Detroit.

The Michigan Employment Security Commission releases monthly vehicle employment, hours, and earnings data for Michigan and its regions. The MESC, also, from time-to-time, conducts surveys of Michigan manufacturers regarding automotive related employment.

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TABLE XVI-1. WORLD PRODUCTION OF MOTOR VEHICLES, BY COUNTRY: 1958-1982 (cont.)

Year	Argentina	Australia	Brazil	India	Korea	Mexico	South Africa	World
1958	26,100	241,324	61,129	26,796	--	38,955	96,254	11,354,337
1959	32,952	263,592	96,243	36,997	--	51,118	98,738	13,870,486
1960	89,338	326,250	133,078	51,126	--	49,807	113,097	16,376,878
1961	136,188	231,651	145,674	53,865	--	62,563	90,660	15,209,521
1962	129,880	329,829	191,057	56,967	--	66,637	106,145	18,198,265
1963	104,899	374,058	174,221	51,416	--	69,135	147,945	20,711,023
1964	166,483	411,750	183,045	67,135	--	90,752	195,756	22,014,424
1965	194,536	407,596	185,155	72,577	--	96,654	174,991	24,560,345
1966	179,453	343,929	224,574	72,530	--	113,807	183,700	24,975,313
1967	175,318	366,547	225,418	70,359	--	126,365	193,600	24,167,203
1968	180,976	418,307	278,473	79,541	--	143,478	211,791	28,576,465
1969	218,590	451,917	349,519	76,215	--	165,164	256,296	30,029,277
1970	219,599	473,790	416,047	82,766	28,819	192,841	297,573	29,688,899
1971	253,640	470,122	516,038	89,110	23,002	210,840	295,682	33,707,307
1972	278,222	466,917	608,985	90,048	18,648	229,766	292,277	35,736,263
1973	311,614	454,190	729,135	97,917	26,314	285,513	342,383	39,190,815
1974	286,312	489,339	858,470	87,889	30,290	350,755	341,927	34,980,303
1975	240,036	456,167	929,805	74,276	36,264	360,678	363,605	33,299,017
1976	193,517	456,216	985,469	85,058	48,292	324,979	300,248	38,579,952
1977	235,356	452,592	919,242	89,145	83,000	280,813	256,801	41,204,788
1978	179,875	384,966	1,062,197	98,846	156,418	384,128	303,723	42,628,080
1979	253,217	461,468	1,127,966	101,273	204,447	444,426	314,067	41,909,508
1980	281,669	364,109	1,165,207	113,326	123,135	490,006	404,756	38,783,756
1981	172,350	391,614	779,836	148,887	133,084	597,118	453,541	37,550,845
1982	132,116	408,570	860,593	152,429	163,484	472,637	n.a.	36,088,358

SOURCE: Motor Vehicle Manufacturers Association of the United States, World Motor Vehicle Data (Detroit: 1983).
n.a.: Data not available.

TABLE XVI-1. WORLD PRODUCTION OF MOTOR VEHICLES, BY COUNTRY: 1958-1982

Year	United States	Canada	Japan	France	West Germany	Italy	United Kingdom	Russia	Spain
1958	5,121,269	356,418	188,303	1,127,549	1,495,221	403,560	1,364,407	511,074	31,050
1959	6,723,588	367,939	262,814	1,283,159	1,718,544	500,784	1,560,427	494,994	56,800
1960	7,905,117	397,739	481,551	1,369,210	2,055,127	644,633	1,810,700	523,591	58,209
1961	6,652,938	386,923	813,879	1,244,223	2,147,825	759,140	1,464,134	555,330	75,000
1962	8,197,311	505,187	990,706	1,536,133	2,356,594	946,793	1,674,530	577,500	100,163
1963	9,108,776	631,356	1,283,531	1,736,977	2,667,896	1,180,536	2,011,720	587,012	131,988
1964	9,307,860	670,990	1,702,475	1,615,896	2,909,657	1,090,078	2,332,376	603,100	178,128
1965	11,137,830	846,609	1,875,614	1,641,696	2,976,477	1,175,548	2,177,261	634,312	228,935
1966	10,396,299	872,214	2,286,399	2,024,552	3,050,708	1,365,898	2,042,354	675,300	340,418
1967	9,023,736	919,508	3,146,486	2,009,672	2,482,319	1,542,669	1,937,119	728,800	361,637
1968	10,820,410	1,150,218	4,085,826	2,075,617	3,106,958	1,660,370	2,225,122	800,700	393,433
1969	10,205,911	1,326,478	4,674,923	2,459,072	3,604,567	1,595,951	2,182,793	844,300	454,571
1970	8,283,949	1,159,504	5,289,147	2,750,086	3,842,247	1,854,252	2,098,498	916,118	536,026
1971	10,671,654	1,346,765	5,810,774	3,010,294	3,982,722	1,817,019	2,198,146	1,142,700	532,358
1972	11,310,708	1,430,084	6,294,438	3,328,320	3,815,982	1,839,793	2,329,430	1,379,000	695,217
1973	12,681,513	1,574,820	7,082,757	3,596,179	3,949,065	1,957,994	2,163,941	1,602,000	822,020
1974	10,072,662	1,524,874	6,551,840	3,462,847	3,099,777	1,772,515	1,936,685	1,846,000	837,414
1975	8,986,605	1,424,006	6,941,591	2,861,305	3,186,208	1,458,629	1,648,399	1,964,056	814,164
1976	11,497,391	1,640,112	7,841,447	3,402,715	3,868,089	1,590,677	1,705,506	2,024,660	866,240
1977	12,702,782	1,775,445	8,514,522	3,507,881	4,104,216	1,583,917	1,714,240	2,088,369	1,129,700
1978	12,899,202	1,817,457	9,269,153	3,507,930	4,186,364	1,656,115	1,607,467	2,150,984	1,143,831
1979	11,479,993	1,631,661	9,635,546	3,613,458	4,249,743	1,632,289	1,478,512	2,173,200	1,122,918
1980	8,009,841	1,374,359	11,042,884	3,378,433	3,878,553	1,610,287	1,312,914	2,199,200	1,181,659
1981	7,942,916	1,322,780	11,179,962	3,019,370	3,897,007	1,433,743	1,184,205	2,197,000	987,474
1982	6,985,595	1,276,452	10,731,794	3,148,807	4,062,665	1,453,043	1,156,477	2,172,700	1,069,507

TABLE XVI-1. WORLD PRODUCTION OF MOTOR VEHICLES, BY COUNTRY: 1958-1982 (cont.)

Year	Poland	Belgium	Sweden	Yugoslavia	East Germany	Czechoslovakia	Netherlands	Hungary	Austria
1958	27,000	382	91,179	7,696	54,163	58,556	1,586	5,200	19,166
1959	34,500	343	112,394	8,658	67,341	66,662	6,812	4,900	20,187
1960	36,400	256	128,527	15,921	76,000	73,684	19,339	5,600	12,568
1961	35,990	800	131,755	21,254	84,200	77,053	18,592	6,400	13,484
1962	41,129	1,043	151,568	21,197	88,000	81,224	28,577	7,700	12,395
1963	48,388	1,200	167,850	28,898	94,000	70,781	22,362	6,000	10,078
1964	54,853	2,070	184,018	38,692	102,000	55,468	36,182	8,000	7,660
1965	59,800	166,594	205,717	45,452	118,056	90,713	36,047	7,131	5,044
1966	66,975	195,219	199,910	48,834	126,626	113,421	39,993	7,990	4,210
1967	68,359	183,087	214,560	55,641	134,101	133,174	56,749	8,250	3,729
1968	84,921	172,906	244,786	74,106	139,116	150,299	66,523	8,500	4,088
1969	101,800	302,549	271,440	94,983	147,680	158,582	71,659	9,000	5,417
1970	118,100	272,433	310,887	130,563	153,378	169,920	79,219	9,200	3,937
1971	145,700	295,764	317,295	132,368	60,762	176,862	91,312	9,500	6,878
1972	156,100	271,453	305,989	126,412	69,616	182,937	99,666	10,000	6,255
1973	190,400	298,957	378,042	143,826	80,203	197,802	107,452	10,500	6,278
1974	200,878	183,128	368,359	189,728	88,930	200,877	82,081	12,075	4,642
1975	258,300	222,176	366,753	205,567	197,457	211,073	72,098	12,100	7,699
1976	312,100	326,978	367,780	216,071	202,371	215,836	86,561	12,900	8,739
1977	374,400	336,382	286,901	257,762	204,394	197,585	87,853	13,313	8,177
1978	404,261	303,260	305,534	279,759	210,486	218,468	76,197	15,973	5,486
1979	422,134	314,997	354,820	315,110	220,000	228,738	106,335	13,814	9,376
1980	432,100	259,966	298,400	283,744	216,585	233,812	96,435	16,315	16,061
1981	306,700	257,456	313,755	266,423	219,400	229,513	88,003	13,788	14,920
1982	276,351	278,014	349,066	241,316	221,800	224,449	96,050	13,600	15,155

TABLE XVI-2. PRODUCTION OF MOTOR VEHICLES IN MICHIGAN AND THE UNITED STATES, SELECTED YEARS: 1925-1983

	Cars			Trucks and buses		
Year	Michigan	United States	Percentage	Michigan	United States	Percentage
			(In thousands)			
1925	1,280	3,581	36	126	342	37
1927	1,460	2,826	52	91	330	28
1929	1,595	4,388	36	82	392	21
1931	675	1,921	35	40	246	16
1935	1,587	3,213	49	148	505	29
1953	2,196	6,135	36	n.a.	n.a.	n.a.
1954	1,768	5,509	32	n.a.	n.a.	n.a.
1955	2,708	7,950	34	n.a.	1,254	n.a.
1956	1,917	5,808	33	n.a.	1,012	n.a.
1957	2,118	6,120	35	180	1,100	16
1958	1,239	4,247	29	153	873	18
1959	1,658	5,599	30	184	1,124	16
1960	2,092	6,703	31	203	1,202	17
1961	1,774	5,522	32	171	1,130	15
1962	2,280	6,943	33	228	1,254	18
1963	2,590	7,644	34	265	1,464	18
1964	2,622	7,745	34	385	1,562	25
1965	3,255	9,335	35	495	1,802	27
1966	3,024	8,605	35	515	1,792	29
1967	2,600	7,413	35	459	1,611	28
1968	3,009	8,849	34	511	1,972	26
1969	2,873	8,224	35	533	1,982	27
1970	2,099	6,550	32	454	1,734	26
1971	2,836	8,584	33	587	2,088	28
1972	2,902	8,828	33	734	2,483	30
1973	3,268	9,667	34	1,012	3,015	34
1974	2,403	7,325	33	897	2,747	33
1975	2,249	6,717	33	757	2,270	33
1976	2,914	8,498	34	1,030	3,000	34
1977	2,852	9,214	31	1,077	3,489	31
1978	2,706	9,177	29	1,288	3,723	35
1979	2,582	8,434	31	996	3,046	33
1980	1,732	6,376	27	443	1,634	27
1981	2,040	6,253	33	460	1,690	27
1982	1,818	5,073	36	577	1,913	30
1983	2,077	6,822	30	697	2,421	29

SOURCE: Bureau of the Census, Manufactures 1905 (Washington, D.C.: Government Printing Office, 1908), Part IV, p. 272, and similar documents for years 1909-1935; Automotive News, Almanac Issue, 1954 through 1972; Ward's Communications, Inc., Wards Automotive Yearbook, 1958 through 1972 (Detroit: annually); Motor Vehicle Manufacturers Association, special release; and the various companies, 1972-1983 Michigan figures.

n.a.: not available.

TABLE XVI-5. UNITED STATES-CANADA TRADE IN AUTOMOTIVE PRODUCTS, U.S. IMPORTS FROM CANADA AND CANADIAN IMPORTS FROM THE UNITED STATES: 1977-1983

(millions of U.S. dollars)

Year	Canadian imports[1]			U.S. imports[2]		
	Vehicles	Parts	Total	Vehicles	Parts	Total
1964	57	577	634	22	49	71
1965	142	738	880	88	139	227
1966	356	1,011	1,367	451	360	811
1967	666	1,216	1,882	920	474	1,394
1968	923	1,684	2,607	1,483	783	2,266
1969	976	2,134	3,110	2,097	959	3,056
1970	894	2,019	2,913	2,038	1,080	3,118
1971	1,319	2,448	3,767	2,511	1,481	3,992
1972	1,579	2,866	4,445	2,778	1,795	4,573
1973	2,082	3,552	5,634	3,061	2,172	5,233
1974	2,573	3,980	6,554	3,482	1,997	5,479
1975	3,064	4,409	7,472	3,726	2,008	5,734
1976	3,339	5,550	8,889	4,840	2,983	7,823
1977	3,712	6,434	10,146	5,636	3,496	9,132
1978	3,771	7,080	10,851	6,165	4,160	10,326
1979	4,801	7,344	12,145	5,685	3,831	9,715
1980	3,950	6,478	10,428	5,695	2,888	8,583
1981	4,218	7,700	11,918	6,917	3,462	10,379
1982	3,030	7,824	10,853	9,001	3,963	12,964
1983^{p}	4,856	9,735	14,591	10,877	5,724	16,601

SOURCE: U. S. Department of Commerce, special release.

[1] Canadian import statistics from U.S., based on FAS or transaction values, converted to U.S. dollars on the basis of then prevailing exchange rates.

[2] U.S. imports from Canada are FAS or transaction values as published by the Bureau of the Census.

p: Preliminary

TABLE XVI-6. WHERE DOMESTIC TRUCKS WERE BUILT: 1983 MODELS

Place	Models
United States	
	American Motors
Toledo, OH	Jeep vehicles
	Chrysler Corporation
Belvidere, IL	Rampage pickup
Warren, MI	light-duty trucks, Ramcharger
	Ford Motor Company
Kansas City, MO	light trucks
Kentucky	medium, heavy and extra-heavy trucks
Lorain, OH	Econoline, Club wagon
Louisville, KY	Ranger
Norfolk, VA	light trucks
Wayne, MI	Bronco, light trucks
Twin Cities, MN	light trucks
	General Motors Corporation
Arlington, TX	El Camino, Caballero pickups
Detroit, MI	Commercial, recreational, specialty vehicle chassis
Flint, MI	Chevrolet, GMC pickups, Blazers, Jimmy, Suburban wagons
Jonesville, WI	Chevrolet, GMC light trucks
Lordstown, OH	Chevrolet, GMC vans
Moraine, OH	Chevrolet S-10, GMC S-15 trucks
Pontiac, MI	Chevrolet, GMC light and medium-duty trucks, GMC heavy trucks, Chevrolet S-10 and GMC S-15 trucks and buses
Shreveport, LA	Chevrolet S-10, GMC S-15 trucks
St. Louis, MO	Chevrolet, GMC light trucks
	International Harvester
Springfield, OH	medium and heavy trucks
	Mack Trucks
Hayward, CA	heavy Mack trucks
Macungie, PA	heavy Mack trucks

TABLE XVI-6. WHERE DOMESTIC TRUCKS WERE BUILT: 1983 MODELS (cont.)

Place	Models
	Mercedes-Benz Truck Co.
Hampton, VA	medium and heavy trucks
	Nissan Motor Mfg. Co.
Smyrna, TN	pickup trucks
	Volkswagon of America
Westmoreland, PA	light trucks
Canada	
	Chrysler Corporation
Windsor, Ont.	Dodge Caravan, Plymouth Voyager mini-vans, Mini Ram van, T-van
Pillette Road-Windsor, Ont.	Dodge Ram van, Ram Wagon, B-Van
	Ford Motor Company
Oakville, Ont.	light trucks
	General Motors Corporation
Oshawa, Ont.	Chevrolet, GMC pickups
Scarborough, Ont.	Chevy Van, Sportvan, GMC Vandura, Rally
	International Harvester
Chatham, Ont.	medium and heavy trucks

SOURCE: Automotive News, 1983 Market Data Book, and special release.

TABLE XVI-7. MOTOR-VEHICLE-RELATED EMPLOYMENT BY MAJOR MANUFACTURING INDUSTRIES STATE OF MICHIGAN: MARCH 1979, MARCH 1980, AND SEPTEMBER 1983

	Motor-vehicle-related employment					
	March 1979		March 1980		September 1983	
Industry (SIC code)	Number	Percent of total	Number	Percent of total	Number	Percent of total
Manufacturing	655,200	54.8	546,200	51.7	475,600	52.0
Durable goods	607,700	62.6	507,100	59.8	438,000	61.2
Lumber and wood (24)	0	0.0	0	0.0	0	0.0
Furniture and fixtures (25)	800	3.5	700	3.1	700	3.1
Metals (33, 34)	138,100	54.9	109,700	52.6	75,900	47.7
Primary metals (33)	55,300	59.3	43,800	56.0	22,900	44.0
Fabricated metals (34)	82,800	52.4	65,900	50.6	53,000	49.6
Nonelectrical machinery (35)	37,900	22.5	36,200	22.0	31,200	26.5
Electrical machinery (36)	12,000	27.7	8,600	21.9	6,600	21.3
Transportation equipment (37)	414,300	96.7	347,900	96.7	319,600	94.6
Motor vehicles and equipment (371)	414,300	100.0	347,900	100.0	319,600	100.0
Assembly (3711, 3713, 3715)	240,700	100.0	212,500	100.0	202,900	100.0
Parts and accessories (3714)	173,600	100.0	135,300	100.0	116,600	100.0
Other transportation equipment (372-375, 379)	0	0.0	0	0.0	0	0.0
Other durable goods (32, 38, 39)	4,600	10.8	4,000	9.6	4,000	11.1
Nondurable goods	47,500	21.1	39,100	18.7	37,600	19.0
Food and kindred (20)	0	0.0	0	0.0	0	0.0
Textile mill products and apparel (22, 23)	22,000	79.7	15,800	74.5	15,000	74.3
Paper and allied (26)	0	0.0	0	0.0	0	0.0
Printing and publishing (27)	0	0.0	0	0.0	0	0.0
Chemicals, petroleum and related (28, 29)	2,300	4.8	2,000	4.2	2,500	5.8
Other nondurable goods (21, 30, 31)	23,200	55.1	21,300	57.4	20,100	58.3

SOURCE: Michigan Employment Security Commission, Bureau of Research and Statistics, special release.

TABLE XVI-3. PRODUCTION OF MOTOR VEHICLES IN MICHIGAN, BY PLANT, AND IN THE UNITED STATES: 1977-1983

	1977	1978	1979	1980	1981	1982	1983
Dearborn, Ford	141,768	232,326	344,135	241,502	171,056	160,075	148,922
Detroit, Cadillac	279,170	291,168	261,515	115,424	155,622	156,618	180,462
Oldsmobile							5,769
Detroit, Chevrolet truck	31,547	38,059	27,260	18,218	28,416	31,624	31,290
GMC truck							5,162
Detroit, Chrysler, Jefferson Avenue[a]	94,483	45,001	--	69,089	204,704	176,384	258,814
Detroit, Chrysler, Jefferson Avenue Truck[a]	--	22,856	64,330	8,863	--	--	--
Detroit, Chrysler, Lynch Road	184,488	133,470	109,007	47,507	15,992	--	--
Flint, Buick	393,045	382,771	372,676	260,161	297,138	286,937	368,849
Flint, Chevrolet	394,952	432,238	346,447	171,152	157,886	224,187	190,289
GMC							49,147
Hamtramck, Chrysler	338,226	253,681	153,186	1,031	--	--	--
Kalamazoo, Checker	4,777	4,225	4,766	3,197	2,993	2,000	--
Lansing, Oldsmobile	380,958	382,514	492,834	329,607	448,562	442,054	554,919
Pontiac, Pontiac	308,984	306,756	285,349	142,984	150,328	106,846	30,634
Pontiac, GMC truck	135,220	256,749	244,829	101,352	113,405	140,279	53,886
Chevrolet truck							129,972
Warren, Chrysler truck	329,215	327,422	149,308	77,182	92,025	101,452	135,600
Wayne, Ford	278,329	271,662	160,123	157,134	265,325	204,438	252,794
Wayne, Ford truck	186,012	210,676	163,607	66,358	67,941	79,600	92,695
Wixom, Ford	190,572	173,964	140,096	50,927	64,185	97,620	106,531
Ypsilanti, GMAD	257,550	230,022	258,232	312,938	264,333	184,962	170,721
TOTAL, car, Michigan	2,852,350	2,707,560	2,581,919	1,731,501	2,040,238	1,817,934	2,077,412
TOTAL, truck, Michigan	1,076,946	1,288,000	995,781	443,125	459,673	577,142	696,546
TOTAL, car, U.S.	9,213,654	9,176,635	8,433,662	6,375,506	6,253,138	5,073,358	6,821,921
TOTAL, truck, U.S.	3,489,128	3,722,567	3,046,331	1,634,335	1,689,778	1,912,660	2,420,598

SOURCE: The various companies.

a. Converted from car to truck production for the 1978 model year. Car production resumed August, 1981.

TABLE XVI-4. FACTORY SALES OF MOTOR VEHICLES FROM CANADIAN AND U.S. PLANTS, BY CANADIAN, U.S., AND OTHER DESTINATIONS: 1968-1983

	Plants in United States				Plants in Canada				
Year	Exports to Canada	Other Exports	U.S. Domestic	U.S. Total	Exports to U.S.	Other Exports	Canada Domestic	Canada Total	U.S.-Canada Total
					Passenger cars				
1968	288,610	126,399	8,407,149	8,822,158	480,254	36,830	359,195	876,279	9,698,437
1969	286,392	130,847	7,806,476	8,223,715	676,765	35,948	314,890	1,027,603	9,251,318
1970	245,746	113,753	6,187,318	6,546,817	681,872	30,427	206,933	919,232	7,466,049
1971	352,130	110,748	8,121,714	8,584,592	779,769	37,654	258,034	1,075,457	9,660,049
1972	382,463	89,005	8,352,470	8,823,928	836,630	37,293	262,971	1,136,894	9,960,832
1973	476,099	102,699	9,078,849	9,657,647	862,407	41,126	322,506	1,226,039	10,883,686
1974	500,463	109,499	6,721,294	7,331,256	802,370	52,495	316,978	1,171,843	8,503,099
1975	549,353	90,199	6,073,300	6,712,852	713,407	58,149	271,689	1,043,245	7,756,097
1976	562,635	97,167	7,837,801	8,497,603	808,788	75,331	250,525	1,134,644	9,632,247
1977	586,073	102,308	8,512,468	9,200,849	831,994	87,148	236,559	1,155,701	10,356,550
1978	541,552	130,075	8,493,563	9,165,190	764,835	107,037	155,701	1,127,573	10,292,763
1979	582,097	158,991	7,678,138	8,419,226	582,386	92,728	298,060	973,174	9,392,400
1980	488,857	70,864	5,840,305	6,400,026	539,239	86,297	201,588	827,124	7,227,150
1981	454,567	51,398	5,749,375	6,255,340	516,430	102,095	153,612	772,137	7,027,477
1982	320,292	32,489	4,696,403	5,049,184	662,014	12,629	107,846	782,489	5,831,673
1983	505,262	32,577	6,201,384	6,739,223	773,381	19,394	152,972	945,757	7,684,970
					Trucks and buses				
1968	47,559	83,428	1,765,091	1,896,078	145,258	31,316	100,160	276,734	2,172,812
1969	60,251	81,745	1,781,177	1,923,179	197,551	30,318	87,300	315,169	2,238,348
1970	53,646	73,125	1,565,669	1,692,440	157,532	32,429	62,118	252,079	1,944,519
1971	69,026	69,812	1,914,308	2,053,146	166,307	29,924	83,107	279,338	2,332,487
1972	94,453	57,983	2,294,371	2,446,807	204,405	23,223	90,595	318,223	2,765,030

TABLE XVI-4. FACTORY SALES OF MOTOR VEHICLES FROM CANADIAN AND U.S. PLANTS, BY CANADIAN, U.S., AND OTHER DESTINATIONS: 1968-1983 (cont.)

Year	Plants in United States				Plants in Canada				U.S.-Canada Total
	Exports to Canada	Other Exports	U.S. Domestic	U.S. Total	Exports to U.S.	Other Exports	Canada Domestic	Canada Total	
				Trucks and buses (cont.)					
1973	120,463	72,412	1,786,813	2,979,688	215,260	27,293	112,974	355,527	3,335,215
1974	167,514	90,173	2,469,626	2,727,313	188,895	39,556	148,048	376,499	3,103,812
1975	133,701	135,701	2,002,758	2,272,160	181,165	47,742	161,158	390,065	2,662,225
1976	128,524	116,855	2,733,670	2,979,049	265,623	44,065	188,226	497,914	3,476,963
1977	135,078	127,423	3,179,020	3,441,521	347,592	47,278	210,614	605,484	4,047,005
1978	138,970	151,621	3,415,648	3,706,239	396,935	51,195	214,169	662,299	4,368,538
1979	158,394	137,231	2,741,081	3,036,706	348,231	43,861	240,983	633,075	3,669,781
1980	86,420	117,055	1,463,808	1,667,283	290,529	47,228	188,211	525,968	2,193,251
1981	89,030	98,282	1,513,140	1,700,452	303,646	58,567	152,313	514,526	2,214,978
1982	70,552	56,707	1,778,181	1,905,440	371,691	15,530	69,503	456,724	2,362,164
1983	106,237	47,474	2,260,186	2,413,897	442,167	10,388	93,000	545,555	2,959,452
				Total motor vehicles					
1968	336,169	209,827	10,172,240	10,718,236	625,512	68,146	459,355	1,153,013	11,871,249
1969	346,649	212,592	9,587,653	10,146,894	874,316	66,266	402,190	1,342,772	11,489,666
1970	299,392	186,878	7,752,987	8,239,257	839,404	62,856	269,051	1,171,311	9,419,568
1971	421,156	180,560	10,036,022	10,637,738	946,076	67,578	341,141	1,354,795	11,992,533
1972	476,916	146,988	10,646,841	11,270,745	1,041,035	60,516	353,566	1,455,117	12,725,862
1973	596,562	175,111	11,865,662	12,637,335	1,077,667	68,419	435,480	1,581,566	14,218,901
1974	667,977	199,672	9,190,920	10,058,569	991,265	92,051	465,026	1,548,342	11,606,911
1975	683,054	225,900	8,076,058	8,985,012	894,572	105,891	432,847	1,433,310	10,418,322
1976	691,159	214,022	10,571,471	11,476,652	1,074,411	119,396	438,751	1,632,558	13,109,210
1977	721,151	229,731	11,691,488	12,642,370	1,179,586	134,426	447,173	1,761,185	14,403,555
1978	680,522	281,696	11,909,211	12,871,429	1,161,770	158,232	469,870	1,789,872	14,661,301
1979	740,491	296,222	10,419,219	11,455,932	930,617	136,589	539,043	1,606,249	13,062,181
1980	575,277	187,919	7,304,113	8,067,309	829,768	133,525	389,799	1,353,092	9,420,401
1981	543,597	149,680	7,262,515	7,955,792	820,076	160,662	305,925	1,286,663	9,242,455
1982	390,844	89,196	6,474,584	6,954,624	1,033,705	28,159	177,349	1,239,213	8,193,837
1983	611,499	80,051	8,461,570	9,153,120	1,215,548	29,782	245,972	1,491,302	10,644,422

SOURCE: Motor Vehicle Manufacturers Association of the United States, Inc., special release.

TABLE XVI-8. TOTAL EMPLOYMENT IN THE MOTOR VEHICLE INDUSTRY, NARROWLY DEFINED, MICHIGAN AND THE UNITED STATES: 1956-1983

	Employment		
Year	Michigan (000)	United States (000)	Michigan as a percentage of U.S.
1956	411.7	792.5	52
1957	387.7	769.3	50
1958	288.5	606.5	48
1959	303.4	692.3	44
1960	311.2	724.1	43
1961	268.4	632.3	42
1962	299.2	691.7	43
1963	315.8	741.3	43
1964	329.3	752.9	44
1965	364.5	842.7	43
1966	381.9	861.6	44
1967	361.8	815.8	44
1968	382.8	873.7	44
1969	398.7	911.4	44
1970	335.3	799.0	42
1971	353.6	848.5	42
1972	369.5	874.8	42
1973	401.0	976.5	41
1974	366.1	907.7	40
1975	321.2	792.4	41
1976	357.6	881.0	41
1977	386.5	947.3	41
1978	409.6	1,004.9	41
1979	392.7	990.4	40
1980	326.3	788.8	41
1981	319.4	783.9	41
1982	287.0	690.0	42
1983	303.2	772.7	39

SOURCE: Michigan Employment Security Commission, special release; and Bureau of Labor Statistics, special release.

TABLE XVI-9. GENERAL MOTORS EMPLOYMENT AND DIRECT COMPENSATION IN MICHIGAN: 1974-1983

(In thousands of dollars)

Plant city	Year	Employees[a]	Direct compensations[b]
Adrain-Tecumseh	1974	766	10,248
	1975	825	13,707
	1976	1,083	21,000
	1977	1,255	26,300
	1978	1,427	26,300
	1979	1,443	33,800
	1980	1,285	30,700
	1981	1,618	44,900
	1982	1,537	44,100
	1983	1,782	57,200
Bay City	1974	3,423	46,538
	1975	3,006	46,663
	1976	3,586	65,950
	1977	3,805	79,979
	1978	3,868	88,330
	1979	3,598	79,917
	1980	2,500	75,900
	1981	2,581	74,400
	1982	2,241	64,600
	1983	2,468	78,200
Flint	1974	63,180	962,027
	1975	59,572	1,014,131
	1976	67,347	1,422,169
	1977	73,562	1,715,752
	1978	76,933	1,865,837
	1979	75,981	1,926,009
	1980	62,200	1,808,800
	1981	65,738	1,800,000
	1982	55,359	1,700,000
	1983	57,990	1,980,000
Grand Rapids	1974	6,636	100,954
	1975	6,030	97,383
	1976	6,862	133,658
	1977	7,353	156,518
	1978	7,652	173,752
	1979	8,169	203,694
	1980	7,400	191,200
	1981	8,143	222,000
	1982	6,645	181,000
	1983	7,487	234,900

TABLE XVI-9. GENERAL MOTORS EMPLOYMENT AND DIRECT COMPENSATION IN MICHIGAN: 1974-1983 (cont.)

(In thousands of dollars)

Plant city	Year	Employees[a]	Direct compensations[b]
Kalamazoo	1974	2,716	42,345
	1975	2,682	48,998
	1976	3,244	69,902
	1977	3,668	83,858
	1978	3,725	86,952
	1979	3,831	97,967
	1980	2,666	79,600
	1981	3,239	102,800
	1982	2,730	85,900
	1983	3,072	108,500
Lansing	1974	16,841	250,076
	1975	16,928	287,412
	1976	18,796	399,658
	1977	20,558	471,868
	1978	22,225	525,835
	1979	23,432	583,343
	1980	20,500	547,600
	1981	22,793	682,000
	1982	21,378	655,700
	1983	23,126	842,200
Livonia	1974	6,441	92,600
	1975	6,444	99,900
	1976	8,188	149,200
	1977	8,713	171,400
	1978	8,808	180,800
	1979	8,720	195,600
	1980	6,240	168,800
	1981	7,109	197,000
	1982	6,697	204,300
	1983	7,547	246,300
Milford	1974	1,727	26,300
	1975	1,700	25,435
	1976	2,175	41,900
	1977	2,386	48,200
	1978	2,256	53,400
	1979	2,790	74,500
	1980	2,685	73,700
	1981	2,609	79,300
	1982	2,516	83,400
	1983	2,473	88,700

TABLE XVI-9. GENERAL MOTORS EMPLOYMENT AND DIRECT COMPENSATION IN MICHIGAN: 1974-1983 (cont.)

(In thousands of dollars)

Plant city	Year	Employees[a]	Direct compensations[b]
Pontiac	1974	29,831	438,809
	1975	25,238	410,200
	1976	31,367	625,700
	1977	33,220	733,900
	1978	37,212	849,300
	1979	39,200	926,700
	1980	30,500	836,500
	1981	27,704	824,000
	1982	23,949	747,100
	1983	26,275	814,300
Saginaw	1974	22,266	336,584
	1975	19,969	343,241
	1976	22,661	472,011
	1977	24,307	565,624
	1978	25,765	631,277
	1979	26,127	642,468
	1980	19,500	574,700
	1981	20,755	617,600
	1982	16,831	510,500
	1983	17,503	607,600
Three Rivers	1980	1,055	29,000
	1981	1,840	52,000
	1982	1,919	59,800
	1983	1,939	65,400
Ypsilanti	1974	9,876	148,251
	1975	9,710	154,525
	1976	12,352	238,700
	1977	14,691	300,900
	1978	15,303	357,300
	1979	18,446	459,400
	1980	17,270	470,200
	1981	15,854	448,900
	1982	12,844	354,900
	1983	12,274	369,100
Statewide	1981	228,750	n.a.
	1982	178,264	5,400,000
	1983	201,629	6,540,000

SOURCE: General Motors Corporation, special release.

NOTE: Separate figures are not available for the cities of Detroit and Warren because of the large number of people on temporary assignment, on the payroll of divisions scattered around the world. For 1973-1975, figures pertain to permanent employees of the proving grounds. For 1976-1982, figures are estimates that include permanent employees and personnel from other divisions on temporary assignment.

a. Annual averages of monthly wage and salary jobs at GM facilities.

b. Does not include health insurance, pension contributions, supplemental unemployment benefits, unemployment insurance, and other fringe benefits. 1980 direct compensations include supplemental unemployment benefits.

n.a.: not available.

TABLE XVI-10. NUMBER AND AVERAGE STRAIGHT TIME HOURLY EARNINGS OF WORKERS IN SELECTED OCCUPATIONS IN THE PASSENGER CAR, LIGHT TRUCK, AND MOTOR VEHICLE PARTS OPERATIONS OF AMERICAN MOTORS, CHRYSLER, FORD, GENERAL MOTORS AND VOLKSWAGON OF AMERICA: 1963, 1969, 1973, AND 1983

	April 1963		April 1969		December 1973		May 1983	
	MI	U.S.	MI	U.S.	MI	U.S.	MI	U.S.
				Maintenance				
Carpenters, number	435	682	506	802	513	871	358	778
earnings	$3.36	$3.35	$4.63	$4.62	$6.46	$6.46	$13.50	$13.50
Electricians, number	3,300	6,038	3,582	7,079	3,907	8,581	5,041	10,704
earnings	3.46	3.46	4.75	4.74	6.65	6.65	13.80	13.76
Machine repairmen, number	3,554	6,159	4,056	7,090	4,287	7,905	4,922	10,005
earnings	3.50	3.50	4.78	4.79	6.64	6.65	13.81	13.78
Millwrights, number	3,568	6,475	3,762	7,039	3,819	7,597	4,162	8,445
earnings	3.39	3.38	4.64	4.64	6.48	6.48	13.58	13.51
Pipefitters, number	2,025	3,846	2,266	4,701	2,448	5,441	3,022	6,579
earnings	3.39	3.38	4.64	4.64	6.48	6.48	13.55	13.52
Sheet-metal workers, number	738	1,247	783	1,427	833	1,606	888	1,952
earnings	3.39	3.38	4.63	4.63	6.47	6.45	13.63	13.60
General, number	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	500	1,173
earnings	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	12.71	12.51
				Toolroom				
Die Sinkers, number	148	239	102	201	53	142	48	82
earnings	4.31	4.29	5.68	5.58	7.39	7.23	14.90	14.70
Machine tool operators, number	2,344	3,853	2,128	3,564	1,950	3,552	3,137	6,230
earnings	3.49	3.49	4.76	4.76	6.62	6.61	13.73	13.71
Patternmakers, number	894	1,497	913	1,433	605	878	344	672
earnings	4.11	4.09	5.44	5.44	7.40	7.40	14.83	14.79
Truckers, number	7,809	13,876	9,236	17,161	9,255	17,440	7,674	17,685
earnings	3.62	3.62	4.91	4.91	6.79	6.79	13.72	13.80

TABLE XVI-10. NUMBER AND AVERAGE STRAIGHT TIME HOURLY EARNINGS OF WORKERS IN SELECTED OCCUPATIONS IN THE PASSENGER CAR, LIGHT TRUCK, AND MOTOR VEHICLE PARTS OPERATIONS OF AMERICAN MOTORS, CHRYSLER, FORD, GENERAL MOTORS AND VOLKSWAGON OF AMERICA: 1963, 1969, 1973, AND 1983 (cont.)

	April 1963		April 1969		December 1973		May 1983	
	MI	U.S.	MI	U.S.	MI	U.S.	MI	U.S.
Custodial and material movement								
Checkers, number	2,936	5,590	3,679	6,554	3,225	5,964	1,845	3,685
earnings	$2.76	$2.76	$3.61	$3.62	$5.30	$5.31	$11.76	$11.73
Janitors, number	4,061	8,207	5,533	10,633	5,337	10,893	3,053	7,983
earnings	2.52	2.52	3.37	3.37	5.00	5.00	11.23	11.20
Laborers, number	3,361	8,028	3,786	7,229	4,306	8,660	1,525	4,121
earnings	2.66	2.66	3.52	3.53	5.18	5.19	11.06	11.27
Truckers (power), number	6,120	11,701	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
earnings	2.71	2.72	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Truckdrivers (outside-semi), number	n.a.	n.a.	1,206	1,356	1,382	1,626	744	1,026
earnings	n.a.	n.a.	3.91	3.91	6.12	6.11	12.24	12.29
Truckdrivers (outside-other than semi) number	n.a.	n.a.	609	1,011	414	699	256	515
earnings	n.a.	n.a.	3.65	3.66	5.31	5.31	11.85	11.82
Truckdrivers (inside, gas and electric), number	n.a.	n.a.	10,386	18,663	11,732	21,924	7,143	14,259
earnings	n.a.	n.a.	3.57	3.57	5.25	5.25	11.59	11.58
Production								
Assemblers (line and bench), number	34,237	79,212	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
earnings	2.73	2.74	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Assemblers (major), number	n.a.	n.a.	39,968	98,859	42,107	104,590	24,955	71,242
earnings	n.a.	n.a.	3.62	3.62	5.29	5.29	11.57	11.61
Assemblers (minor), number	n.a.	n.a.	19,527	12,374	7,794	12,726	5,164	15,920
earnings	n.a.	n.a.	3.52	3.53	5.22	5.21	11.68	11.49

TABLE XVI-10. NUMBER AND AVERAGE STRAIGHT TIME HOURLY EARNINGS OF WORKERS IN SELECTED OCCUPATIONS IN THE PASSENGER CAR, LIGHT TRUCK, AND MOTOR VEHICLE PARTS OPERATIONS OF AMERICAN MOTORS, CHRYSLER, FORD, GENERAL MOTORS AND VOLKSWAGON OF AMERICA: 1963, 1969, 1973, AND 1983 (cont.)

	April 1963		April 1969		December 1973		May 1983	
	MI	U.S.	MI	U.S.	MI	U.S.	MI	U.S.
Crib Attendants, number	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,291	2,414
earnings	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	$12.27	$12.11
General Foundry Laborers, number	n.a.	n.a.	4,829	3,137	1,856	3,024	1,101	2,448
earnings	n.a.	n.a.	3.58	3.59	5.29	5.24	11.90	11.84
Heat treaters (furnace), number	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	398	729
earnings	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11.70	11.48
Controlmen, number	n.a.	n.a.	304	520	209	424	141	269
earnings	n.a.	n.a.	3.72	3.72	5.39	5.39	11.85	11.80
Load and Unload, number	n.a.	n.a.	732	2,075	686	1,261	257	460
earnings	n.a.	n.a.	3.60	3.55	5.28	5.27	11.61	11.29
Inspectors (general production), number	12,627	24,211	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
earnings	2.78	2.79	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Inspectors (final), number	n.a.	n.a.	4,172	10,404	5,054	12,161	n.a.	n.a.
earnings	n.a.	n.a.	3.75	3.76	5.43	5.44	n.a.	n.a.
Inspectors (floor), number	n.a.	n.a.	3,920	6,809	4,422	7,885	n.a.	n.a.
earnings	n.a.	n.a.	3.72	3.73	5.50	5.41	n.a.	n.a.
Inspectors (general), number	n.a.	n.a.	8,717	15,189	8,171	15,929	n.a.	n.a.
earnings	n.a.	n.a.	3.61	3.61	5.32	5.32	n.a.	n.a.
Inspectors and checkers (production), number	n.a.	n.a.	2,325	3,470	1,834	2,932	1,348	2,578
earnings	n.a.	n.a.	3.65	3.66	5.32	5.33	11.84	11.64
Inspectors, number	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	10,788	24,964
earnings	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11.77	11.79
Machine tool operators (production), number	16,736	29,511	18,728	30,315	15,971	28,447	8,029	17,787
earnings	n.a.	n.a.	3.64	3.64	5.32	5.31	11.74	11.67
Bar stock screw-machine operators, number	799	1,643	946	1,814	570	1,192	663	1,424
earnings	2.95	2.92	3.88	3.87	5.57	5.54	12.21	12.12

TABLE XVI-10. NUMBER AND AVERAGE STRAIGHT TIME HOURLY EARNINGS OF WORKERS IN SELECTED OCCUPATIONS IN THE PASSENGER CAR, LIGHT TRUCK, AND MOTOR VEHICLE PARTS OPERATIONS OF AMERICAN MOTORS, CHRYSLER, FORD, GENERAL MOTORS AND VOLKSWAGON OF AMERICA: 1963, 1969, 1973, AND 1983 (cont.)

	April 1963		April 1969		December 1973		May 1983	
	MI	U.S.	MI	U.S.	MI	U.S.	MI	U.S.
Crankshaft grinders, number	615	917	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
earnings	$2.85	$2.86	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other, number	15,322	26,951	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
earnings	2.76	2.76	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
General (except set-up men), number	n.a.	n.a.	10,115	17,825	8,904	17,490	4,175	10,511
earnings	n.a.	n.a.	3.61	3.61	5.30	5.27	11.58	11.52
Special (except set-up men), number	n.a.	n.a.	7,667	10,676	6,697	9,765	3,221	5,852
earnings	n.a.	n.a.	3.66	3.66	5.34	5.34	11.87	11.84
Metalfinishers, number	1,504	4,130	1,977	4,538	1,517	3,413	421	985
earnings	2.89	2.89	3.79	3.78	5.47	5.48	11.41	11.72
Molders (machine), number	397	570	378	568	305	602	n.a.	216
earnings	2.89	2.89	3.79	3.79	5.50	5.50	n.a.	12.12
Punch-press operators, (except set-up men), number	12,072	21,349	17,548	29,191	15,031	25,824	7,432	16,314
earnings	2.75	2.76	3.63	3.62	5.33	5.33	11.42	11.70
Body stamping, number	n.a.	n.a.	6,890	12,295	7,024	11,627	3,120	8,103
earnings	n.a.	n.a.	3.68	3.69	5.37	5.36	11.13	11.62
General, number	n.a.	n.a.	8,649	14,119	6,129	11,838	3,879	7,461
earnings	n.a.	n.a.	3.58	3.57	5.28	5.29	11.61	11.78
Heavy, number	n.a.	n.a.	2,009	2,777	1,878	2,359	433	750
earnings	n.a.	n.a.	3.66	3.66	5.29	5.36	11.81	11.76

TABLE XVI-10. NUMBER AND AVERAGE STRAIGHT TIME HOURLY EARNINGS OF WORKERS IN SELECTED OCCUPATIONS IN THE PASSENGER CAR, LIGHT TRUCK, AND MOTOR VEHICLE PARTS OPERATIONS OF AMERICAN MOTORS, CHRYSLER, FORD, GENERAL MOTORS AND VOLKSWAGON OF AMERICA: 1963, 1969, 1973, AND 1983 (cont.)

	April 1963		April 1969		December 1973		May 1983	
	MI	U.S.	MI	U.S.	MI	U.S.	MI	U.S.
Sewing Machine operator,								
number	3,307	3,974	4,890	5,445	4,943	5,441	3,445	4,590
earnings	2.67	2.66	3.56	3.55	5.28	5.28	11.57	11.64
Sprayers, number	1,871	4,750	1,711	4,658	1,596	4,364	864	3,098
earnings	2.87	2.87	3.79	3.78	5.48	5.46	11.72	11.76
Trimmers, number	1,75	4,871	2,134	5,799	1,732	4,781	847	2,172
earnings	2.86	2.84	3.72	3.72	5.40	5.41	11.61	11.72
Welders (hand), number	2,862	5,224	3,405	5,605	3,067	6,302	2,117	4,734
earnings	2.88	2.88	3.78	3.78	5.48	5.46	11.79	11.98
Class A, number	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	288	871
earnings	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.84	13.60
Class B, number	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,829	3,863
earnings	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11.47	11.61
Welders (machine), number	6,309	15,451	9,715	22,348	9,520	22,032	5,079	13,352
earnings	2.79	2.81	3.65	3.67	5.32	5.34	11.49	11.69
Plant Operators (general),								
number	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,451
earnings	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11.97
Polishing and Buffing Machine Operators,								
number	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	159	540
earnings	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11.75	11.62

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, special release.

TABLE XVI-11. NEW PASSENGER CAR AND TRUCK REGISTRATIONS IN MICHIGAN AND THE UNITED STATES, BY NAMEPLATE: 1982 AND 1983

	1982		1983	
Make	Michigan	United States	Michigan	United States
Passenger cars				
AMC[a]	10,913	108,706	22,284	190,797
Chrysler	12,879	171,878	18,777	254,175
Dodge	17,491	252,183	22,059	307,633
Plymouth	16,270	243,519	16,712	258,684
Ford	52,589	899,470	70,789	1,034,732
Lincoln	8,524	87,820	7,021	97,206
Mercury	25,910	316,293	34,372	395,041
Buick	39,854	713,671	53,050	818,256
Cadillac	10,338	240,197	14,678	211,552
Chevrolet	61,888	1,222,624	72,056	1,310,503
Oldsmobile	43,721	775,705	59,598	971,229
Pontiac	32,362	461,149	43,721	536,404
Other	42,354	2,271,130	49,945	2,457,974
TOTAL	374,643	7,754,342	485,062	8,924,186
Motor trucks				
Chrysler Corp.	10,093	228,252	13,614	263,687
Ford	35,236	733,120	43,759	942,568
Chevrolet	28,082	758,107	42,447	904,672
G.M.C.	9,298	212,908	16,471	247,970
International	1,112	45,902	1,670	50,562
Jeep truck	2,904	62,097	3,416	76,453
PACCAR	165	13,125	258	15,998
Mack	247	15,590	173	15,038
White[b]	31	4,666	132	6,197
Other[c]	3,856	346,452	4,932	439,448
TOTAL	91,159	2,430,471	127,078	2,976,556

SOURCE: Compiled from data supplied by R.L. Polk & Company. Further reproduction not authorized without the express permission of R.L. Polk & Company.

a. Passenger cars manufactured by American Motors Corporation.
b. Trucks manufactured by White Motor Corporation.
c. Domestic and foreign.

TABLE XVI-12. NEW PASSENGER CAR AND NEW TRUCK REGISTRATIONS IN MICHIGAN, BY COUNTY: 1978-1983

County	1978	1979	1980	1981	1982	1983
			Passenger cars			
Alcona	467	479	328	353	281	370
Alger	342	322	288	261	177	253
Allegan	2,894	2,761	2,142	2,090	1,522	1,958
Alpena	1,416	1,342	940	882	654	825
Antrim	608	609	458	409	371	513
Arenac	781	770	512	526	396	564
Baraga	444	344	306	306	192	272
Barry	1,565	1,485	1,166	1,080	890	1,220
Bay	6,620	5,954	4,168	4,126	3,147	4,049
Benzie	485	483	329	345	290	356
Berrien	9,039	8,123	6,014	5,534	4,866	6,500
Branch	1,923	1,657	1,109	1,045	838	1,133
Calhoun	7,334	6,391	4,333	4,333	3,549	4,533
Cass	1,989	1,684	1,259	1,280	1,045	1,523
Charlevoix	916	870	687	668	560	758
Cheboygan	855	768	561	525	454	571
Chippewa	1,169	978	893	867	585	712
Clare	1,114	958	811	849	717	815
Clinton	2,322	2,241	1,524	1,591	1,320	1,841
Crawford	457	423	305	272	239	365
Delta	1,416	1,265	968	1,039	857	1,066
Dickinson	1,122	1,037	834	753	526	826
Eaton	3,710	3,607	2,476	2,618	2,037	2,896
Emmet	1,124	947	871	851	654	856
Genesee	36,292	32,941	22,534	23,047	20,332	27,459
Gladwin	875	866	736	682	535	718
Gogebic	669	619	558	487	389	475
Grand Traverse	2,880	2,903	2,272	2,245	1,910	2,476
Gratiot	1,779	1,647	1,284	1,241	929	1,201
Hillsdale	1,768	1,488	1,025	1,079	850	1,115
Houghton	1,089	994	907	861	716	819
Huron	1,902	1,727	1,346	1,341	985	1,238
Ingham	22,268	19,915	14,418	14,721	13,553	17,116
Ionia	2,306	2,296	1,606	1,537	1,156	1,625
Iosco	1,338	1,276	989	927	872	1,183
Iron	557	505	478	444	322	474
Isabella	1,867	1,716	1,187	1,291	1,080	1,336
Jackson	7,877	7,058	4,932	4,966	3,896	5,321
Kalamazoo	11,635	10,598	8,584	8,123	6,962	8,656
Kalkaska	403	404	307	260	257	327

TABLE XVI-12. NEW PASSENGER CAR AND NEW TRUCK REGISTRATIONS IN MICHIGAN, BY COUNTY: 1978-1983 (cont.)

County	1978	1979	1980	1981	1982	1983
Kent	27,079	25,627	20,147	18,832	15,866	20,579
Keweenaw	78	72	65	50	53	57
Lake	228	220	185	167	143	180
Lapeer	3,856	3,777	2,513	2,566	1,941	2,764
Leelanau	462	431	355	327	332	423
Lenawee	5,242	4,507	3,105	3,042	2,380	3,301
Livingston	5,586	5,447	3,933	4,155	3,315	4,639
Luce	255	287	204	162	136	206
Mackinac	402	396	327	317	253	320
Macomb	65,443	62,197	46,314	47,491	41,167	50,107
Manistee	1,056	948	699	735	548	697
Marquette	2,992	2,740	2,287	2,531	1,938	2,692
Mason	1,018	1,086	778	753	574	726
Mecosta	1,258	1,204	950	906	679	926
Menominee	836	791	627	564	451	593
Midland	3,650	3,565	2,913	2,961	2,466	3,022
Missaukee	369	375	293	293	232	314
Monroe	6,465	6,149	4,044	4,500	4,005	4,975
Montcalm	2,304	2,330	1,650	1,651	1,236	1,670
Montmorency	396	401	270	276	255	300
Muskegon	6,516	6,289	4,960	4,410	3,405	4,261
Newaygo	1,233	1,183	1,021	930	765	945
Oakland	104,638	97,597	75,764	75,490	66,959	88,963
Oceana	829	877	731	616	454	583
Ogemaw	721	643	508	463	418	543
Ontonagon	395	392	363	309	234	268
Osceola	794	860	603	632	535	644
Oscoda	223	206	135	151	164	172
Otsego	796	723	638	611	503	739
Ottawa	7,716	7,552	6,022	5,947	4,621	5,816
Presque Isle	594	589	409	434	306	395
Roscommon	1,013	916	682	715	669	813
Saginaw	14,374	12,796	9,067	9,335	7,765	10,446
St. Clair	6,673	5,969	4,345	4,377	3,597	4,347
St. Joseph	2,824	2,490	1,946	1,867	1,466	1,920
Sanilac	2,169	1,825	1,348	1,279	926	1,222
Schoolcraft	424	443	327	295	230	277
Shiawassee	4,311	4,054	2,664	2,821	2,113	3,026
Tuscola	2,999	2,945	2,156	2,162	1,525	2,166
Van Buren	2,977	2,749	2,156	1,965	1,541	1,883

TABLE XVI-12. NEW PASSENGER CAR AND NEW TRUCK REGISTRATIONS IN MICHIGAN, BY COUNTY: 1978-1983 (cont.)

County	1978	1979	1980	1981	1982	1983
Washtenaw	17,940	15,123	11,325	11,612	10,497	12,584
Wayne	211,886	187,021	131,958	129,433	105,322	136,170
Wexford	1,028	1,031	830	827	563	804
State owned	2,035	2,169	1,416	943	1,183	1,266
TOTAL	669,700	611,443	448,071	445,758	374,643	485,062
			Trucks			
Alcona	232	173	109	73	110	148
Alger	266	180	122	82	102	139
Allegan	1,861	1,532	775	601	647	947
Alpena	766	633	320	228	259	377
Antrim	377	270	161	114	129	231
Arenac	394	337	143	140	188	241
Baraga	294	204	104	92	110	149
Barry	917	716	382	270	344	578
Bay	2,525	1,764	924	813	1,057	1,545
Benzie	293	180	90	75	110	168
Berrien	4,127	3,029	1,530	1,233	1,559	2,083
Branch	1,222	832	466	419	430	572
Calhoun	2,744	1,988	1,026	877	1,063	1,463
Cass	1,262	937	406	404	493	877
Charlevoix	538	388	204	132	193	359
Cheboygan	436	335	141	132	187	273
Chippewa	671	489	282	246	285	390
Clare	697	470	282	276	330	441
Clinton	1,296	966	435	397	519	923
Crawford	262	206	110	73	113	196
Delta	734	542	314	290	399	556
Dickinson	666	586	321	281	248	436
Eaton	2,142	1,454	736	559	799	1,278
Emmet	548	439	230	165	215	358
Genesee	11,701	7,347	3,566	3,290	4,299	6,795
Gladwin	582	396	220	210	247	354
Gogebic	402	324	223	179	178	262
Grand Traverse	1,568	1,189	772	673	735	991
Gratiot	899	736	364	330	365	550
Hillsdale	1,020	712	347	292	321	530
Houghton	559	401	286	177	200	368
Huron	905	707	411	378	341	507
Ingham	6,818	5,222	2,513	2,012	2,488	4,051
Ionia	1,363	995	522	462	501	799
Iosco	686	434	257	198	266	405

TABLE XVI-12. NEW PASSENGER CAR AND NEW TRUCK REGISTRATIONS IN MICHIGAN, BY COUNTY: 1978-1983 (cont.)

County	1978	1979	1980	1981	1982	1983
Iron	368	343	234	126	173	315
Isabella	980	718	433	446	455	683
Jackson	3,373	2,585	1,257	991	1,170	1,735
Kalamazoo	4,052	3,073	1,697	1,399	1,552	2,439
Kalkaska	382	306	212	209	240	256
Kent	9,621	8,125	4,362	3,212	4,096	6,615
Keweenaw	28	27	25	6	14	25
Lake	137	135	72	68	58	78
Lapeer	2,305	1,519	650	530	735	1,183
Leelanau	219	157	93	73	107	149
Lenawee	2,543	1,629	778	656	878	1,261
Livingston	2,445	1,770	810	718	964	1,548
Luce	186	126	95	58	84	148
Mackinac	262	183	104	91	117	162
Macomb	17,645	12,206	7,984	8,086	9,408	12,449
Manistee	544	389	224	153	249	319
Marquette	1,974	1,238	760	665	683	1,100
Mason	582	489	239	169	228	297
Mecosta	709	535	312	299	361	482
Menominee	452	374	232	169	151	235
Midland	1,455	1,060	563	529	684	1,016
Missaukee	310	233	152	143	132	204
Monroe	3,213	1,658	973	940	1,272	1,711
Montcalm	1,331	1,043	546	476	589	862
Montmorency	292	198	92	61	95	151
Muskegon	3,133	2,310	1,258	938	962	1,656
Newaygo	748	575	327	299	338	444
Oakland	22,617	15,771	8,951	7,874	10,086	15,964
Oceana	627	510	281	183	209	283
Ogemaw	431	343	190	162	205	282
Ontonagon	234	189	153	121	105	143
Osceola	615	481	252	255	288	360
Oscoda	158	111	54	40	72	82
Otsego	569	434	234	208	218	344
Ottawa	3,476	2,839	1,435	1,198	1,421	2,246
Presque Isle	407	297	156	130	145	182
Roscommon	556	344	236	188	229	314
Saginaw	4,789	3,488	1,880	1,631	1,990	3,164
St. Clair	2,856	1,861	1,009	923	1,019	1,449
St. Joseph	1,616	1,145	649	544	662	952

TABLE XVI-12. NEW PASSENGER CAR AND NEW TRUCK REGISTRATIONS IN MICHIGAN, BY COUNTY: 1978-1983 (cont.)

County	1978	1979	1980	1981	1982	1983
Sanilac	1,195	828	430	351	377	507
Schoolcraft	252	213	136	105	119	184
Shiawassee	2,126	1,479	676	644	683	1,183
Tuscola	1,762	1,226	649	567	653	1,051
Van Buren	1,808	1,489	745	593	600	908
Washtenaw	4,924	3,264	1,797	1,567	2,131	3,013
Wayne	39,885	27,721	19,891	16,783	23,768	25,711
Wexford	642	456	238	226	247	324
State owned	632	647	770	453	307	569
TOTAL	203,329	144,606	83,620	72,429	91,159	127,078

SOURCE: R.L. Polk & Co., Motor Statistical Division, special release.

XVII. TRANSPORTATION

The Interstate Commerce Commission in its various publications, especially Transport Statistics in the United States, gives extensive information about railroads. The Association of American Railroads also collects railway statistics.

Data on the Michigan highway system are obtained from the reports of the Michigan State Highway Commission. Information on drivers' licenses and the registration of motor vehicles is given in the reports of the Michigan Department of State. The Michigan Department of State Police collects statistics on the number of motor vehicle traffic accidents in Michigan. The Bureau of Public Roads of the U.S. Department of Commerce publishes an annual report, Highway Statistics, that gives a great deal of information about the nation's public roads.

The Federal Aviation Agency releases a number of publications, including the FAA Statistical Handbook of Aviation, FAA Air Traffic Activity, and Census of U.S. Civil Aircraft, which contain a wealth of information pertaining to aviation activities.

Information regarding freight traffic on Michigan waterways can be found in Waterborne Commerce of the United States, a publication of the Corps of Engineers of the U.S. Department of the Army.

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TABLE XVII-1. DISTRIBUTION OF MICHIGAN TRANSPORTATION FUND, FISCAL YEARS: 1963-1983

(Millions of dollars)

Fiscal year	State trunkline fund	Comprehensive transportation fund	Counties	Munici-palities	Total
1963	106	--	79	41	226
1964	111	--	83	43	237
1965	118	--	88	45	251
1966	125	--	93	48	266
1967	129	--	96	50	309
1968[a]	148	--	104	57	309
1969	164	--	122	71	357
1970	175	--	129	76	380
1971	181	--	134	79	394
1972[b]	193	--	143	84	420
1973	215	18	164	94	491
1974	231	21	185	103	540
1975	228	22	183	102	537
1976[c]	277	27	223	125	652
1977	246	23	198	110	578
1978	249	24	201	112	586
1979[d]	272	59	245	136	712
1980[e]	260	56	236	131	684
1981	239	52	217	121	628
1982	231	50	210	117	608
1983	247	65	231	124	667

SOURCE: The Michigan State Transportation Commission, special release.

a. Change in registration fees and motor fuel taxes.
b. Change in gasoline tax.
c. Covers 7/1/75 to 9/30/76.
d. Change in motor fuel taxes.
e. Change in diesel fuel tax.

NOTE: Following is a chronology of Michigan motor vehicle taxes and fees.

1905 - Public Act 196 of 1905 - License Plates
Rate: $2.00 per automobile (not annually).
Manufacturers get duplicates at 50 cents each.
License transfers are $1.00 each.
Chauffeurs pay $1.00 for an operator's license.
Disposition: After deduction of administrative charges, the balance is to be applied to furthering good roads for the benefit of the State at large.

1907 - Public Act 304 of 1907. Change in fees.
Rate: $1.00 per car and 50 cents for annual renewals.
Transfers are $1.00.
Manufacturers pay $5.00 for five sets of plates and 50 cents for duplicates.

NOTE: (cont.)

1909 - Public Act 318 of 1909. Change in fees.
Rate: $3.00 per car annually and $1.00 for duplicates.
Transfers are $1.00.
Manufacturer pays $10.00 for first plates and $2.00 for each duplicate set.
Chauffeurs pay $2.00 annually.
Disposition: To State General Fund.

1916 - Public Act 302 of 1915. Effective January 1, 1916. Change in fees.
Rate: Cars operated by gas or steam - 25 cents per horsepower plus 25 cents per 100 pounds of weight. Electric cars, $1.00 per horsepower plus 25 cents per 100 pounds. Trucks, gas or steam, 15 cents per horsepower plus 15 cents per 100 pounds. Trucks, electric, 50 cents per horsepower and 25 cents per 100 pounds.
Duplicate plates $1.00.
Annual renewals required at same rates as above.
Manufacturers or dealers pay $50.00 for the first five cars, and $10.00 each thereafter.
Transfers $1.00 each.
Disposition: To the counties, 50% of the license plate fees, divided in proportion to their origin. Balance to State Highway Department.

1919 - Public Act 383 of 1919. Change in fees.
Rate: Changed to 25 cents per horsepower plus 35 cents per 100 pounds on all classes of automobiles.
Public Act 368 of 1919. Operators License Act.
Rate: 50 cents for license to drive
Disposition: To General Fund.

1925 - Public Act 1 of 1925. Change in fees.
Rate: Passenger cars - 55 cents per 100 pounds of weight.
Trucks - 65 cents per 100 pounds up to 2,500 pounds.
80 cents per 100 pounds from 2,500 to 4,000 pounds.
$1.00 per 100 pounds from 4,000 to 6,000 pounds.
$1.25 per 100 pounds over 6,000 pounds.
Trailers - 50 cents and $1.00. Motorcycles $5.00. Motor bicycles $2.50, transfers $1.00.
Disposition: $6,000,000 of weight tax to counties on basis of origin. Balance to State Highway Fund.

1925 - Public Act 2 of 1925. Gasoline Tax.
Rate: Two cents per gallon on gasoline used by motor vehicles.
Disposition: All to State Highway Department except $1,500,000 to counties in 1925 and $2,000,000 to counties in 1926 and annually thereafter.

1927 - Public Act 150 of 1927. Change in Gasoline Tax.
Rate: 3 cents per gallon.
Disposition: To counties $2,000,000 per year. Also an amount equal to 1/2 the weight tax, minus $6,000,000. This is divided, 7/8 on the basis of origin of the weight tax and 1/83 of 1/8 to each county. $2,000 per mile of city and village trunkline maintenance. Balance to State Highway Fund.

NOTE: (cont.)

1931 - Public Act 130 of 1931. McNitt Act.
Apportions to counties for maintenance and improvement of McNitt Roads, payable out of gas tax.
1932 - $2,000,000
1933 - $2,500,000
1934 - $3,000,000
1935 - $3,500,000
1936 - $4,000,000 and annually thereafter.
Public Act 91 of 1931. Change in operator's and chauffeur's licenses.
Rate: $1.00 for operators, $2.00 for chauffeurs. Operator license renewal every three years. Chauffeurs license renewable annually.

1934 - Public Act 7 of 1934. Change weight tax.
Rate: Passenger cars 35 cents per 100 pounds.
Trucks 65 cents up to 2,500 pounds.
80 cents up to 2,500 to 4,000 pounds.
$1.00 - 4,000 to 6,000 pounds.
$1.25 - over 6,000 pounds.
Disposition: To counties 100 percent.

1947 - Public Act 319 of 1947. Diesel fuel tax.
Diesel fuel tax at 5 cents per gallon.
Disposition: To State Highway Fund.

1951 - Public Act 54 of 1951. Change in fuel tax rates.
Gasoline tax increased to 4-1/2 cents per gallon.
Diesel Fuel tax increased to 6 cents per gallon.
Disposition: To Motor Vehicle Highway Fund
Distribution: 37 percent to counties
19 percent to cities.
44 percent to State Trunkline Fund
Public Act 55 of 1951. Change registration fees.
Rate: Trucks - 65 cents per 100 pounds for 0-2,500 pounds to $2.00 per 100 pounds for over 15,000 pounds.
Road Tractor or truck tractor - 65 cents per 100 pounds for 0-2,500 pounds to $2.00 per 100 pounds for over 10,000 pounds.

1953 - Public Act 147 of 1953. Liquid Petroleum Gasoline tax rate.
Liquid Petroleum Gasoline taxed at 4-1/2 cents per gallon.
Disposition: To Motor Vehicle Highway Fund.

1967 - Public Act 3 of Extra Session of 1967. Changes registration fees.
Rate: Automobiles - 55 cents per 100 pounds. Minimum fee of $12.00.
Trucks - from 80 cents per 100 pounds for 0-2,500 pounds to $2.50 per 100 pounds for 15,000 pounds and over.
Road or truck tractor - elected gross weight from $150 for 0-24,000 pounds to $980 for 130,000 pounds and over.
Disposition: To Motor Vehicle Highway Fund.

1967 - Public Act 5 of Extra Session of 1967. Change fees.
Gasoline tax increased to 7 cents per gallon.
Diesel Fuel tax increased to 7 cents per gallon.
Liquid Petroleum Gasoline tax increased to 7 cents per gallon.

1969 - Public Act 309 of 1969. Change fees.
Rate: Road or truck tractor - elected gross weight.
From $243 for 0-24,000 pounds to $1,660 for 160,001 pounds and over.
Disposition: Motor Vehicle Highway Fund.

NOTE: (cont.)

1972 - Public Act 327 of 1972. Change fees.
Gasoline tax increased to 9 cents per gallon.
Liquid Petroleum Gasoline tax increased to 9 cents per gallon.
Diesel tax stays at 7 cents.
Disposition: To Motor Vehicle Highway Fund.

1978 - Public Act 426 of 1978. Effective January 1, 1979. Change in fees.
Gasoline tax increased to 11 cents per gallon.
Diesel Fuel tax increased to 9 cents per gallon.

1978 - Public Act 427 of 1978. Changes in fees.
Rate: Automobile registration from $20 for 0-3,000 pounds to $74 for 10,000 pounds and 74 cents per 100 pounds over 10,000 pounds. Trucks - from $1.08 per 100 pounds for 0-2,500 pounds to $3.38 per 100 pounds for 15,001 pounds and over. Road or truck tractor - elected gross weight. From $243 for 0-24,000 pounds to $1,660 for 160,001 pounds and over.
Disposition: To Michigan Transportation Fund
Distribution: 19 percent to cities and villages
34.3 percent to counties
46.7 percent to Department of Transportation
(17.78 percent to comprehensive Transportation)
(82.22 percent to Trunkline Fund)

1980 - Public Acts 117, 118, 119, of 1980. Change in fees.
Diesel Fuel tax increased to 11 cents per gallon.
Motor carrier may receive 6 cents per gallon discount by purchasing permit ($92 for Michigan resident - $12 for non-resident)
Carriers not purchasing diesel fuel in Michigan must report and pay a road tax equivalent to the 5 cents tax paid by carriers licensed within the State. Provisions sunset on May 1, 1981.
Continued by Public Act 16 of 1981, Public Act 128 of 1982.
Sunset repealed by Public Act 441 of 1982.

Public Act 153 of 1980. Change in fees.
Rate: Reduces truck GVW fee for 145,001-160,000 pounds from $1,512.00 to $1,479.00 and over 160,000 pounds from $1,660.00 to $1,594.00.

Public Act 333 of 1980. Gasohol Tax rate.
Gasohol (as defined) taxed at 6 cents per gallon from December 23, 1980 through December 31, 1982, at 8 cents for 1983 calendar year, at 9 cents for 1984 calendar year, and 11 cents for 1985 calendar year and thereafter.

1982 - Public Act 435 of 1982. Gasohol Tax rate.
Gasohol taxed at 6 cents per gallon through 1984 calendar year, 8 cents for 1985 calendar year, 9 cents for 1986 calendar year and 11 cents for 1987 and thereafter.
Public Act 437 of 1982. Change in tax rate.
Effective January 1, 1983, tax rate for all fuels shall be a minimum of 11 cents per gallon or the tax rate calculated using the Federal maintenance figure for the most recent preceding calendar year divided by the 1980 maintenance index figure, times the gallonage figure for the year ending September 30, 1980 divided by the gallonage figure for the fiscal year preceding the year for which the tax is being calculated, times 12 cents. Beginning January 1, 1985, the tax rate shall remain as the tax rate imposed on December 31, 1984.

Gasohol Tax rate revised. Rate imposed for gasohol blended with alcohol from Michigan or a state with an equivalent tax reduction - through December 31, 1984 - five cents less than the motor fuel tax rate, three cents less in calendar 1985 and two cents less in 1986. Effective April 1, 1983, rate reduced to four cents less through December 31, 1984 and two cents less for 1985, due to imposition of federal tax on gasohol. Gasohol tax rate for gasohol blended with alcohol from state without equivalent tax reduction - through December 31, 1984 - one cent less than the motor fuel tax rate.

Disposition: To Michigan Transportation Fund.

Public Act 438 of 1982. Revision of Distribution of Michigan Transportation fund. Total of revenues to Michigan Transportation Fund - Less: Administrative costs, 1.023% of net Gasoline Tax to Waterways Fund, $3.5 million to Mackinac Bridge Authority, 10% of the balance to the Comprehensive Transportation Fund, and $5.0 million to the Critical Bridge Fund. The balance is distributed to the State Trunkline Fund, 41.9% for January 1, 1983 - September 30, 1983 and 39.1 percent for October 1, 1983 - September 30, 1985, to County Road Commissions, 37.4% for January 1, 1983 - September 30, 1983 and 39.1 percent for October 1, 1983 - September 30, 1985, to Cities and Villages, 20.7% for January 1, 1983 - September 30, 1983 and 21.8 percent for October 1, 1983 - September 30, 1985. Distribution after September 30, 1985 to be determined by study.

1982 - Public Act 439 of 1982. Change in fees.

Rate: Passenger registrations on weight tax schedule from $23.00 for 0-3,000 pounds to $85.00 for 9,501-10,000 pounds and .85 per 100 pounds over 10,000 pounds. Trucks from $1.40 per 100 pounds for 0-2,500 pounds to $4.39 per 100 pounds for 15,001 pounds and over. Road or truck tractor - elected gross weight - from $316.00 for 0-24,00 pounds to $2,072 over 160,000 pounds.

Effective October 1, 1983, new vehicles other than commercial to be registered at .4% of the purchase price for the first year and on a descending scale of 90% of the previous year's rate for the second, third and fourth year. After the fourth year, the rate remains constant.

Disposition: To Michigan Transportation Fund.

1983 - Public Act 165 of 1982. Change in fees.

Rate: After September 30, 1983, each passenger vehicle of the 1984 of subsequent model year is taxes for the first year on basis of list price at $30 for $0-$6,000 list price to $148.00 for $29,000-$30,000 list price. More than $30,000 list price taxed at 0.5% of the list price. Second, third, and fourth year taxed at 90% of the previous year's rate. After the fourth year, the rate remains constant.

TABLE XVII-2. EXISTING MUNICIPAL AND RURAL ROAD MILEAGE, BY TYPE AND BY GOVERNMENTAL LEVEL WITH PRIMARY JURISDICTION, MICHIGAN AND THE UNITED STATES: 1973-1982

		Rural						
		Type			Governmental level with primary jurisdiction			Total rural and municipal
Year	Municipal	Surfaced	Non-surfaced	Total	State	Local	Federal[a]	
				Michigan				
1973	19,601	81,809	16,900	98,709	8,014	88,035	2,660	118,310
1974	19,916	81,935	16,740	98,675	8,243	87,972	2,460	118,591
1975	19,982	82,771	16,037	98,808	8,300	88,048	2,460	118,790
1976	20,053	83,624	15,321	98,945	8,316	88,169	2,460	118,998
1977	20,097	48,062[b]	51,006[b]	99,068	8,336	88,272	2,460	119,165
1978	20,190	48,264	50,905	99,169	8,345	88,364	2,460	119,359
1979	20,274	49,993	49,813	99,806	8,800	88,546	2,460	120,080
1980	22,257	n.a.	n.a.	91,979	7,739	84,240	0	117,236
1981	25,120	n.a.	n.a.	92,276	7,715	84,561	0	117,396
1982	25,145	n.a.	n.a.	92,280	7,697	84,583	0	117,425
				United States				
1973	631,129	2,436,070	739,684	3,175,754	710,461	2,249,446	215,747	3,806,883
1974	637,655	2,452,247	725,905	3,178,152	706,295	2,247,709	224,148	3,815,807
1975	639,550	2,483,355	715,241	3,198,596	710,797	2,260,544	227,255	3,838,146
1976	648,321	2,508,903	700,132	3,209,035	711,406	2,263,788	233,841	3,857,356
1977	687,328	2,498,428	681,411	3,179,839	702,215	2,235,670	242,147	3,867,400[c]
1978	694,655	2,534,409	655,999	3,190,408	704,421	2,255,526	230,850	3,885,452
1979	694,274	2,498,282	725,428	3,223,710	697,821	2,281,353	244,371	3,917,819
1980	624,053	n.a.	n.a.	3,331,334	701,846	2,269,770	262,010	3,955,387
1981	632,013	n.a.	n.a.	3,220,684	725,850	2,236,344	256,257	3,852,697
1982	640,556	n.a.	n.a.	3,225,740	825,385	2,139,790	260,565	3,866,296

SOURCE: Federal Highway Administration, Highway Statistics, 1969 through 1981 (Washington, D.C.: annually), Tables HM-10 (1981).

a. Comprises mileage of roads not forming a part of state or local highway systems.

b. The decrease in surfaced roads in Michigan is due to the surface type reclassification of approximately 36,000 miles of county roads.

c. 233 miles were unclassified by surface.

TABLE XVII-3. MOTOR VEHICLE REGISTRATION IN MICHIGAN, BY TYPE AND COUNTY: FISCAL YEAR ENDING 30 SEPTEMBER 1983

County	Passenger	Commercial	Trailer	Motorcycle	Total
Alcona	6,115	2,411	1,608	327	10,461
Alger	4,117	2,135	1,017	343	7,612
Allegan	42,208	15,946	8,605	2,881	69,640
Alpena	16,609	6,599	4,335	863	28,406
Antrim	9,586	3,463	2,493	594	16,136
Arenac	7,961	3,584	2,253	426	14,224
Baraga	4,187	1,945	919	191	7,242
Barry	23,383	8,840	5,314	1,745	39,282
Bay	64,174	16,796	14,131	3,142	98,243
Benzie	6,560	2,482	1,710	440	11,192
Berrien	89,412	24,915	13,659	4,569	132,555
Branch	20,281	7,947	5,286	1,586	35,100
Calhoun	76,255	19,279	12,964	4,808	133,306
Cass	24,807	9,598	4,991	1,529	40,925
Charlevoix	11,238	4,256	2,617	734	18,845
Cheboygan	11,256	4,489	2,898	732	19,375
Chippewa	13,439	5,703	3,502	777	23,421
Clare	12,606	5,298	3,339	638	21,881
Clinton	28,374	9,749	6,242	1,983	46,348
Crawford	5,057	2,137	1,332	249	8,775
Delta	20,478	8,429	5,777	1,289	35,973
Dickinson	13,852	5,847	3,493	884	24,076
Eaton	44,668	12,602	8,629	3,009	68,908
Emmet	13,482	4,830	2,743	761	21,816
Genesee	246,996	52,577	37,214	11,563	348,350
Gladwin	10,314	4,499	2,993	587	18,393
Gogebic	8,768	3,849	1,983	495	15,095
Gd. Traverse	35,269	10,251	7,659	1,758	54,937
Gratiot	20,095	7,541	4,897	1,352	33,885
Hillsdale	20,590	8,550	4,986	1,435	35,561
Houghton	15,714	5,335	2,393	867	24,309
Huron	19,393	8,177	5,055	1,199	33,824
Ingham	151,494	32,285	18,980	7,639	210,398
Ionia	24,582	8,562	5,184	1,822	40,150
Iosco	15,466	5,241	3,954	880	25,541
Iron	7,110	3,471	1,799	354	12,734
Isabella	21,808	7,774	4,683	1,459	35,724
Jackson	79,417	21,489	13,086	4,490	118,482
Kalamazoo	120,118	26,096	16,490	5,927	168,631
Kalkaska	6,082	3,384	1,908	410	11,784

TABLE XVII-3. MOTOR VEHICLE REGISTRATION IN MICHIGAN, BY TYPE AND COUNTY: FISCAL YEAR ENDING 30 SEPTEMBER 1983 (cont.)

County	Passenger	Commercial	Trailer	Motorcycle	Total
Kent	265,937	58,261	46,801	13,333	384,332
Keweenaw	974	387	184	55	1,600
Lake	4,079	1,910	1,068	180	7,237
Lapeer	34,706	12,252	6,920	2,419	56,297
Leelanau	8,044	2,854	2,143	389	13,430
Lenawee	46,383	15,003	8,929	2,754	73,069
Livingston	54,679	14,645	8,964	2,921	81,209
Luce	3,004	1,562	1,076	149	5,791
Mackinac	4,887	2,285	1,400	316	8,888
Macomb	443,800	60,031	41,937	13,488	559,256
Manistee	12,201	4,463	2,884	664	20,212
Marquette	33,847	12,199	6,091	2,355	54,492
Mason	13,728	5,105	3,221	935	22,989
Mecosta	14,548	5,586	3,334	745	24,213
Menominee	13,104	5,614	3,360	845	22,923
Midland	44,298	10,179	9,479	2,329	66,285
Missaukee	5,137	2,809	1,540	333	9,819
Monroe	71,397	19,867	13,219	4,016	108,499
Montcalm	24,586	9,420	5,747	1,525	41,278
Montmorency	4,237	2,069	1,320	225	7,851
Muskegon	85,642	21,040	15,114	5,225	127,021
Newaygo	17,625	7,776	4,522	1,368	31,291
Oakland	641,381	93,227	58,248	20,067	812,923
Oceana	10,843	4,880	2,370	728	18,821
Ogemaw	9,215	4,631	2,712	512	17,070
Ontonagon	4,775	2,300	1,354	271	8,700
Osceola	9,458	4,380	2,300	596	16,734
Oscoda	4,003	1,907	1,137	222	7,269
Otsego	8,608	3,595	2,213	459	14,875
Ottawa	90,477	22,733	18,817	5,580	137,607
Presque Isle	6,994	3,282	1,870	413	12,559
Roscommon	10,501	3,748	2,956	538	17,743
Saginaw	122,454	26,624	20,932	4,756	174,766
St. Clair	74,990	19,476	11,774	3,691	109,931
St. Joseph	29,751	10,849	6,210	2,158	48,968
Sanilac	19,890	7,901	4,375	1,292	33,458
Schoolcraft	4,341	1,999	1,217	271	7,828
Shiawassee	36,342	11,944	7,102	2,515	57,903
Tuscola	28,239	11,660	7,641	2,034	49,574
Van Buren	33,211	12,676	5,807	2,029	53,723

TABLE XVII-3. MOTOR VEHICLE REGISTRATION IN MICHIGAN, BY TYPE AND COUNTY: FISCAL YEAR ENDING 30 SEPTEMBER 1983 (cont.)

County	Passenger	Commercial	Trailer	Motorcycle	Total
Washtenaw	140,253	25,042	13,682	6,086	185,063
Wayne	1,194,595	157,938	93,402	31,373	1,477,308
Wexford	13,529	4,909	3,314	757	22,509
Nonresident	27,734	12,443	14,703	275	55,155

SOURCE: Michigan Department of State, special release.

TABLE XVII-4. MOTOR VEHICLE REGISTRATION IN MICHIGAN, BY TYPE: 1978-1983

Type	1978	1979	1980	1981	1982	1983
Passenger	5,126,907	5,162,138	5,220,972	4,848,924	5,075,091	5,101,748
Commercial	1,081,990	1,122,898	1,095,634	1,047,504	1,095,057	1,121,822
Trailer	818,232	775,261	760,533	721,381	778,374	726,510
Motorcycle	242,706	251,210	254,129	243,858	230,794	219,929
TOTAL	7,269,835	7,311,507	7,331,268	6,861,667	7,179,316	7,170,009

SOURCE: Michigan Department of State, special release.

TABLE XVII-5. MOTOR VEHICLE ACCIDENTS AND MILEAGE AND DEATH RATE IN MICHIGAN: 1947-1982

Year	Deaths	Injuries	Accidents	Estimated mileage (millions)	Death rate[a]
1947	1,447	38,195	137,619	17,661.1	8.2
1948	1,512	40,892	140,172	19,069.2	7.9
1949	1,441	41,647	143,197	19,990.4	7.2
1950	1,605	45,734	161,750	21,494.5	7.5
1951	1,640	48,418	176,587	22,668.1	7.2
1952	1,736	49,119	160,829	23,093.1	7.5
1953	1,905	57,834	184,174	25,346.9	7.5
1954	1,793	56,444	185,534	26,041.2	6.9
1955	2,016	62,234	196,812	28,282.5	7.1
1956	1,746	61,158	197,995	28,429.3	6.1
1957	1,548	60,067	191,915	29,252.2	5.3
1958	1,382	57,767	177,934	29,411.3	4.7
1959	1,473	64,873	198,771	30,679.0	4.8
1960	1,604	91,026	209,724	31,842.4	5.0
1961	1,567	93,350	199,973	32,101.5	4.9
1962	1,574	108,143	233,078	34,498.0	4.6
1963	1,887	126,896	261,794	36,452.2	5.2
1964	2,122	144,623	284,444	38,617.6	5.5
1965	2,136	155,258	310,598	40,857.4	5.2
1966	2,298	156,694	302,880	43,940.1	5.2
1967	2,137	151,297	299,004	45,053.6	4.7
1968	2,392	160,413	305,495	48,047.4	5.0
1969	2,487	175,400	331,223	50,904.9	4.9
1970	2,177	161,719	313,715	53,148.1	4.1
1971	2,152	157,664	314,015	55,539.7	3.9
1972	2,258	178,929	359,745	57,817.1	3.9
1973	2,213	169,485	350,864	58,478.4	3.8
1974	1,825	141,132	324,763	55,748.7	3.4
1975	1,811	147,299	333,560	56,260.5	3.2
1976	1,955	162,894	365,600	61,827.4	3.2
1977	1,950	166,389	374,751	64,800.0	3.0
1978	2,076	169,202	389,193	67,375.0	3.1
1979	1,849	162,571	366,435	64,882.0	2.9
1980	1,774	144,972	315,594	61,190.0	2.9
1981	1,589	136,455	302,831	62,000.0	2.6
1982	1,417	130,061	294,971	61,321.7	2.3

SOURCE: Michigan Department of State Police, *Michigan Traffic Accident Facts, 1982* (Lansing: 1983).

[a] Deaths per 100 million miles of travel.

TABLE XVII-7. NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENTS, PERSONS KILLED, AND PERSONS INJURED IN MICHIGAN, BY COUNTY: 1982

	Accidents							Persons	
County	Fatal	Injury	Property damage	Inter-state	Local street	State route	Total	Killed	Injured
Alcona	1	85	305	0	237	154	391	1	136
Alger	1	68	212	0	104	177	281	1	111
Allegan	17	668	1,630	128	1,459	728	2,315	21	1,010
Alpena	11	236	676	0	510	413	923	14	363
Antrim	2	129	330	0	257	204	461	2	172
Arenac	7	153	430	60	270	260	590	7	229
Baraga	2	57	214	0	153	120	273	2	83
Barry	12	346	1,121	0	1,006	473	1,479	19	514
Bay	20	965	2,227	137	1,835	1,240	3,212	20	1,427
Benzie	1	100	303	0	230	174	404	2	142
Berrien	24	1,440	3,802	657	3,219	1,380	5,266	24	2,117
Branch	4	277	927	116	745	347	1,208	5	404
Calhoun	16	1,341	3,861	843	3,436	939	5,128	18	1,998
Cass	6	393	1,101	0	865	635	1,500	9	591
Charlevoix	2	171	537	0	361	349	710	2	232
Cheboygan	5	205	443	90	345	218	653	5	292
Chippewa	8	200	733	208	585	148	941	8	305
Clare	4	234	723	0	502	459	961	5	361
Clinton	12	448	1,116	178	994	404	1,576	12	686
Crawford	1	98	368	159	197	111	467	3	149
Delta	6	365	1,104	0	968	507	1,475	6	537
Dickinson	1	216	652	0	422	447	869	1	295
Eaton	12	718	1,867	310	1,185	1,102	2,597	13	1,070
Emmet	6	239	735	9	507	464	980	7	337
Genesee	75	4,191	8,617	853	8,926	3,104	12,883	86	6,396

TABLE XVII-7. NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENTS, PERSONS KILLED, AND PERSONS INJURED IN MICHIGAN, BY COUNTY: 1982 (cont.)

	Accidents							Persons	
County	Fatal	Injury	Property damage	Inter-state	Local street	State route	Total	Killed	Injured
Gladwin	3	151	503	0	369	288	657	3	226
Gogebic	1	123	585	0	384	330	714	2	169
Grand Traverse	16	724	1,677	0	1,528	889	2,417	16	1,065
Gratiot	7	329	954	0	750	540	1,290	11	472
Hillsdale	6	310	1,008	0	844	480	1,324	7	489
Houghton	4	252	938	0	472	722	1,194	5	329
Huron	3	278	807	0	532	556	1,088	7	407
Ingham	29	2,538	7,008	1,136	5,473	2,966	9,575	33	3,703
Ionia	5	410	1,309	152	1,056	516	1,724	6	635
Iosco	5	234	685	0	509	415	924	6	389
Iron	0	95	366	0	224	237	461	0	147
Isabella	12	524	1,288	0	1,175	649	1,824	12	807
Jackson	28	1,341	3,805	815	3,403	956	5,174	28	1,941
Kalamazoo	21	1,952	6,080	859	5,679	1,515	8,053	21	2,739
Kalkaska	4	139	362	0	258	247	505	7	228
Kent	60	4,544	11,982	880	11,233	4,473	16,586	62	6,454
Keweenaw	1	13	47	0	22	39	61	1	19
Lake	3	82	297	0	211	171	382	3	116
Lapeer	15	513	1,191	0	1,071	648	1,719	17	844
Leelanau	2	110	284	0	198	198	396	4	163
Lenawee	16	736	2,066	0	1,589	1,229	2,818	17	1,068
Livingston	18	801	1,795	407	1,703	504	2,614	20	1,126
Luce	1	46	178	0	90	135	225	1	68
Mackinac	4	111	336	49	158	244	451	6	159
Macomb	79	6,524	12,953	916	12,853	5,787	19,556	83	9,847

TABLE XVII-6. NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENTS, PERSONS KILLED AND PERSONS INJURED, IN MICHIGAN, BY TYPE OF ACCIDENT: 1982

	Number of accidents				Number of persons			
						Injured		
Type of accident	Fatal	Injury	Property damage	Total	Killed	Incapacitated	Nonincapacitated	Possibly[a]
Motor vehicle:								
Overturned	92	5,821	4,188	10,101	93	1,602	3,264	2,864
Other noncollision	18	659	1,193	1,871	19	221	310	202
Motor vehicle collision with:								
Pedestrian	212	4,011	178	4,401	215	1,404	1,589	1,303
Motor vehicle in transport	516	55,243	128,023	183,782	599	9,902	23,524	56,793
Motor vehicle - other roadway	4	35	25	64	4	26	27	23
Parked motor vehicle	24	2,842	26,308	29,174	27	432	1,530	1,627
Railroad train	24	117	140	281	28	55	69	35
Pedalcyclist	50	3,496	550	4,096	50	775	1,685	1,237
Animal	1	579	18,819	19,399	1	91	259	327
Fixed object	338	14,436	26,214	40,988	379	3,874	8,199	6,631
Other object	2	145	668	815	2	34	76	71
TOTAL	1,281	87,384	206,306	294,971	1,417	18,416	40,532	71,113

SOURCE: Michigan Department of State Police, Michigan Traffic Accident Facts 1982.

[a] No visible injury but complaint of pain or momentary unconciousness.

TABLE XVII-7. NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENTS, PERSONS KILLED, AND PERSONS INJURED IN MICHIGAN, BY COUNTY: 1982 (cont.)

	Accidents							Persons	
County	Fatal	Injury	Property damage	Inter-state	Local street	State route	Total	Killed	Injured
Manistee	6	224	702	0	579	353	932	7	311
Marquette	7	550	1,803	0	1,540	820	2,360	7	781
Mason	4	218	837	0	674	385	1,059	4	338
Mecosta	6	306	1,225	0	850	687	1,537	7	451
Menominee	7	221	995	0	776	447	1,223	7	339
Midland	13	570	1,599	0	1,627	555	2,182	13	828
Missaukee	1	89	287	0	212	165	377	1	126
Monroe	32	1,200	2,476	320	2,225	1,163	3,708	34	1,800
Montcalm	11	415	1,413	0	1,014	825	1,839	13	630
Montmorency	3	59	221	0	163	120	283	3	89
Muskegon	27	1,425	3,563	245	3,632	1,138	5,015	31	2,115
Newaygo	5	326	919	0	744	506	1,250	5	511
Oakland	139	10,948	22,328	1,588	25,198	6,629	33,415	151	16,360
Oceana	9	176	434	0	429	190	619	9	286
Ogemaw	8	168	616	155	445	192	792	8	270
Ontonagon	4	48	195	0	85	162	247	6	73
Osceola	8	162	656	0	404	422	826	10	266
Oscoda	3	63	279	0	177	168	345	3	95
Otsego	2	146	437	82	359	144	585	3	221
Ottawa	12	1,193	2,962	250	2,791	1,126	4,167	14	1,749
Presque Isle	4	86	314	0	224	180	404	4	141
Roscommon	1	192	557	65	332	353	750	1	285
Saginaw	30	2,208	4,923	337	4,510	2,314	7,161	36	3,285
St. Clair	35	1,132	3,092	186	2,476	1,597	4,259	37	1,723
St. Joseph	9	485	1,370	0	911	953	1,864	10	717

TABLE XVII-7. NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENTS, PERSON KILLED, AND PERSONS INJURED IN MIHIGAN, BY COUNTY: 1982 (cont.)

	Accidents							Persons	
County	Fatal	Injury	Property damage	Inter-state	Local street	State route	Total	Killed	Injured
Sanilac	12	265	827	0	590	514	1,104	12	439
Schoolcraft	5	79	278	0	130	232	362	5	131
Shiawassee	17	508	1,235	141	1,026	593	1,760	17	766
Tuscola	8	421	1,005	0	863	571	1,434	8	646
Van Buren	14	584	1,334	277	1,231	424	1,932	16	863
Washtenaw	35	2,401	5,437	896	5,085	1,892	7,873	38	3,424
Wayne	200	24,055	48,619	6,617	50,355	15,902	72,874	220	36,108
Wexford	5	233	830	0	472	596	1,068	6	327
TOTAL	1,281	87,384	206,306	20,131	193,231	81,609	294,971	1,417	130,061

SOURCE: Michigan Department of State Police, Michigan Traffic Accident Facts, 1982.

TABLE XVII-8. NUMBER OF AIRCRAFT LANDING FACILITIES, ACTIVE PILOTS, AND ACTIVE CIVIL AIRCRAFT IN MICHIGAN: 1 JANUARY 1962-1982

Year	Aircraft landing facilities[a]	Active pilots[b]	Active civil aircraft		
			Air carrier	General aviation	
				Multiengine	All other
1962	216	12,664	25	347	2,785
1963	226	13,030	23	374	2,896
1964	226	13,535	27	421	2,983
1965	235	15,235	34	438	3,047
1966	241	16,830	39	445	3,260
1967	242	19,338	45	550	3,614
1968	251	21,459	53	611	3,983
1969	278	24,214	44	688	4,245
1970	302	25,706	38	721	4,597
1971	305	25,836	--	--	5,526[c]
1972	376	26,152	--	--	5,511[c]
1973	383	26,585	--	--	n.a.
1974	401	24,409	--	--	6,101[c]
1975	403	24,562	--	--	6,216[c]
1976	400	23,822	--	--	6,254[c]
1977	421	n.a.	--	--	7,494[c]
1978	413	25,317	--	--	6,818[c]
1979	418	25,631	--	--	7,279[c]
1980	413	26,102	--	--	7,243[c]
1981	419	25,594	--	--	7,430[c]
1982	417	22,364	--	--	--

SOURCE: Federal Aviation Administration, FAA Statistical Handbook of Aviation, 1959 through 1980 (Washinton, D.C.: annually), Tables 3.5 7.12, and 8.6 (1981).

a. Civil and military airports and airfields including seaplane bases and heliports. Only those military airports are included which have joint civil use.

b. Represents active pilot certificates held.

c. Total active civil aircraft.

n.a.: not available.

TABLE XVII-9. NUMBER OF AIRCRAFT LANDING FACLITIES IN MICHIGAN AND THE UNITED STATES, BY LENGTH OF LONGEST RUNWAY: 1 JANUARY 1966 AND 1978 AND 31 DECEMBER 1981

	Length of longest runway, in feet					
Item	Under 3,000	3,000 to 3,999	4,000 to 5,999	6,000 to 9,999	10,000 and over	Total
1 January 1966						
Michigan	128	70	29	6	8	241
United States	5,920	1,686	1,281	405	250	9,542
1 January 1978						
Michigan	277	80	36	16	4	413
United States	8,940	2,503	1,773	641	260	14,117
31 December 1981						
Michigan	279	78	37	19	5	417
United States	9,997	2,594	1,909	664	258	15,422

SOURCE: Federal Aviation Administration, FAA Statistical Handbook of Aviation, 1966, 1978, and 1981 (Washington, D.C.: annually), Table 3.4 (1981).
a. Excludes Puerto Rico, Virgin Islands, N. Mariana Isles, and South Pacific.

TABLE XVII-10. SELECTED CHARACTERISTICS OF AIRCRAFT LANDING FACILITIES IN MICHIGAN AND THE UNITED STATES: 1 JANUARY 1966 AND 1978 AND 31 DECEMBER 1981

	1 January 1966		1 January 1978		31 December 1981	
Item	Michigan	United States	Michigan	United States	Michigan	United States[a]
Type of facility						
Airport	234	8,780	390	11,713	381	12,393
Heliport	0	400	15[b]	1,891	29	2,491
Seaplane base	7	362	8	513	5	481
Stolports	n.a.	n.a.	n.a.	n.a.	2	58
Ownership						
Public	115	3,554	133	4,708	133	4,768
Private	126	5,988	280	9,409	284	10,654
Surface and lighting						
Paved						
Lighted	74	1,965	113	3,564	122	3,818
Not lighted	7	764	19	1,749	32	2,153
Unpaved						
Lighted	27	901	43	919	44	960
Not lighted	133	5,912	238	7,885	219	8,502

SOURCE: Federal Aviation Administration, FAA Statistical Handbook of Aviation, 1966, 1978, and 1981 (Washington, D.C.: annually), Tables 3.2 and 3.3 (1981).
a. Excludes Puerto Rico, Virgin Islands, N. Mariana Isles, and South Pacific.
b. Includes short take-off and landing ports.

TABLE XVII-11. PASSENGERS, MAIL AND CARGO FOR AIR CARRIER AIRPORTS: JANUARY-DECEMBER, 1983 (cont.)

Airport Name (community)	Jan. thru Dec.	Passengers			Mail (pounds)			Cargo (tons)		
		Deplaned	Enplaned	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
Marquette County	1982	26,624	27,255	53,879	0	72	72	134.8	39.5	174.3
(Marquette)	1983	32,815	32,942	65,757	29	38	67	178.9	32.2	211.1
	%Chg	23.3	20.9	22.0	100.0	-47.2	-6.9	32.7	-18.5	21.1
Menominee-Marinette	1982	2,327	2,206	4,533	0	0	0	2.6	.6	3.2
(Menominee)	1983	1,675	1,494	3,169	0	0	0	2.4	1.7	4.1
	%Chg	-28.0	-32.3	-30.1	0.0	0.0	0.0	-7.7	183.3	28.1
Muskegon County	1982	46,036	48,612	94,648	1,448	15	1,463	99.1	99.6	198.7
(Muskegon)	1983	44,413	44,690	89,103	445	3	448	84.6	65.1	149.7
	%Chg	-3.5	-8.1	-5.9	-69.3	-80.0	-69.4	-14.6	-34.6	-24.7
Emmet County	1982	16,648	17,307	33,955	462	4,580	5,042	63.0	42.1	105.1
(Pellston)	1983	19,731	20,154	39,885	18	151	169	71.3	52.8	124.1
	%Chg	18.5	16.4	17.5	-96.1	-96.7	-96.6	13.2	25.4	18.1
Tri-City Inter-	1982	144,413	150,312	294,725	44,140	37,664	81,804	346.1	226.2	572.3
national	1983	156,801	163,499	320,300	59,703	38,911	98,614	306.6	183.1	492.7
(Saginaw)	%Chg	8.6	8.8	8.7	35.3	3.3	20.5	-10.5	-19.1	-13.9
Chippewa Co. Inter-	1982	5,318	5,569	10,887	2,498	2,257	4,755	37.4	19.3	56.7
national	1983	4,783	4,969	9,752	435	1,133	1,568	14.6	10.2	24.8
(Sault Ste. Marie)	%Chg	-10.1	-10.8	-10.4	-82.6	-49.8	-67.0	-61.0	-47.2	-56.3
Cherry Capital	1982	64,021	65,368	129,389	17,383	3,756	21,139	241.8	156.8	398.6
(Traverse City)	1983	70,156	68,927	139,083	20,134	8,176	28,310	278.1	172.4	450.5
	%Chg	9.6	5.0	7.3	15.8	117.7	33.9	15.0	9.9	13.0
TOTAL	1982	5,506,011	5,486,994	10,993,035	43,279,267	44,416,124	87,695,391	36,112.3	40,257.3	76,369.6
	1983	5,883,017	5,847,599	11,730,616	43,176,482	42,834,515	86,010,997	42,829.0	42,602.6	85,431.6
	%Chg	6.8	6.6	6.7	-0.2	-3.6	-1.9	18.6	5.8	11.9

SOURCE: Michigan Department of Transportation, special release.

TABLE XVII-11. PASSENGERS, MAIL AND CARGO FOR AIR CARRIER AIRPORTS: JANUARY-DECEMBER, 1983

Airport Name	Jan. thru	Passengers			Mail (pounds)			Cargo (tons)		
(community)	Dec.	Deplaned	Enplaned	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
Phelps Collins	1982	4,046	3,963	8,009	0	0	0	4.9	2.6	7.5
(Alpena)	1983	4,074	4,091	8,165	0	0	0	4.8	3.2	8.0
	%Chg	0.7	3.2	1.9	0.0	0.0	0.0	-2.0	23.1	6.7
W.K. Kellogg Regional	1982	20,348	20,851	41,199	0	0	0	98.8	62.2	161.0
(Battle Creek)	1983	18,212	18,698	36,910	0	0	0	187.5	51.5	239.0
	%Chg	-10.5	-10.3	-10.4	0.0	0.0	0.0	89.8	-17.2	48.4
Ross Field	1982	8,498	9,898	18,396	674	0	674	36.3	53.4	89.7
(Benton Harbor)	1983	10,673	11,454	22,127	0	0	0	6.8	11.1	17.9
	%Chg	25.6	15.7	20.3	-100.0	0.0	-100.0	-81.3	-79.2	-80.0
Wexford County	1982	31	26	57	0	0	0	.1	.1	.2
(Cadillac)	1983	156	195	351	0	0	0	.1	.1	.2
	%Chg	403.2	650.0	515.8	0.0	0.0	0.0	100.0	100.0	100.0
Detroit City	1982	25,856	25,217	51,073	0	0	0	105.1	124.5	229.6
(Detroit)	1983	22,868	23,080	45,948	0	0	0	77.9	88.4	166.3
	%Chg	-11.6	-8.5	-10.0	0.0	0.0	0.0	-25.9	-29.0	-27.6
Detroit Metropolitan	1982	4,457,037	4,418,887	8,875,924	36,618,250	43,539,289	80,157,539	32,902.7	38,085.7	70,988.4
(Detroit)	1983	4,580,235	4,548,393	9,128,628	35,488,051	42,019,947	77,507,998	37,744.0	39,047.8	76,791.8
	%Chg	2.8	2.9	2.8	-3.1	-3.5	-3.3	14.7	2.5	8.2
Delta County	1982	16,571	15,933	32,504	286	2,572	2,858	91.1	37.1	128.2
(Escanaba)	1983	14,797	15,824	30,621	1,522	4,737	6,259	48.2	18.6	66.8
	%Chg	-10.7	-0.7	-5.8	432.2	84.2	119.0	-47.1	-49.9	-47.9
Bishop	1982	45,487	46,286	91,773	6,652	53,515	60,167	77.2	26.2	103.4
(Flint)	1983	83,606	85,005	168,611	19,218	63,530	82,748	154.7	26.5	181.2
	%Chg	83.8	83.7	83.7	188.9	18.7	37.5	100.4	1.1	75.2

TABLE XVII-11. PASSENGERS, MAIL AND CARGO FOR AIR CARRIER AIRPORTS: JANUARY-DECEMBER, 1983 (cont.)

Airport Name (community)	Jan. thru Dec.	Passengers			Mail (pounds)			Cargo (tons)		
		Deplaned	Enplaned	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
Kent County International (Grand Rapids)	1982	366,762	373,477	740,239	5,931,176	611,583	6,542,759	1,207.1	735.9	1,943.0
	1983	494,525	491,416	985,941	7,208,234	487,982	7,696,216	3,074.9	2,360.5	5,435.4
	%Chg	34.8	31.6	33.2	21.5	-20.2	17.6	154.7	220.8	179.7
Houghton County Memorial (Houghton/Hancock)	1982	18,389	18,727	37,116	230	990	1,220	50.1	42.2	92.3
	1983	21,344	19,939	41,283	8,764	4,083	12,847	54.6	44.9	99.5
	%Chg	16.1	6.5	11.2	3,710.4	312.4	953.0	9.0	6.4	7.8
Ford (Iron Mountain)	1982	10,095	10,370	20,465	370,344	19,433	389,777	175.4	167.3	342.7
	1983	10,336	10,662	20,998	55,986	9,244	65,230	68.0	50.8	118.8
	%Chg	2.4	2.8	2.6	-84.9	-52.4	-83.3	-61.2	-69.6	-65.3
Gogebic County (Ironwood)	1982	7,152	6,702	13,854	116	671	787	26.5	12.4	38.9
	1983	5,131	5,158	10,289	69	0	69	11.6	6.6	18.2
	%Chg	-28.3	-23.0	-25.7	-40.5	-100.0	-91.2	-56.2	-46.8	-53.2
Jackson County Reynolds (Jackson)	1982	1,893	1,994	3,887	0	0	0	3.2	1.6	4.8
	1983	1,585	1,429	3,014	0	0	0	2.8	1.6	4.4
	%Chg	-16.3	-28.3	-22.5	0.0	0.0	0.0	-12.5	0.0	-8.3
Kalamazoo Municipal (Kalamazoo)	1982	89,563	86,364	175,927	138,144	85,981	224,125	138.3	185.4	323.7
	1983	106,162	100,989	207,151	199,314	106,987	306,301	138.7	224.6	363.3
	%Chg	18.5	16.9	17.7	44.3	24.4	36.7	0.3	21.1	12.2
Capital City (Lansing)	1982	127,315	129,779	257,094	147,464	53,746	201,210	269.2	135.7	404.9
	1983	177,255	172,858	350,113	114,560	89,593	204,153	313.4	147.9	461.3
	%Chg	39.2	33.2	36.2	-22.3	66.7	1.5	16.4	9.0	13.9
Mackinaw Island (Mackinaw Island)	1982	946	990	1,936	0	0	0	1.1	.7	1.8
	1983	870	881	1,751	0	0	0	.4	.4	.8
	%Chg	-8.0	-11.0	-9.6	0.0	0.0	0.0	-63.6	-42.9	-55.6
Manistee County-Blacker (Manistee)	1982	665	901	1,566	0	0	0	.5	.3	.8
	1983	814	852	1,666	0	0	0	1.1	.6	1.7
	%Chg	22.4	-5.4	6.4	0.0	0.0	0.0	120.0	100.0	112.5

TABLE XVII-12. ITINERANT, LOCAL AND TOTAL OPERATIONS FOR TOWER AIRPORTS, JANUARY-DECEMBER, 1983

Airport name (community)	Jan thru Dec	Itinerant operations: Air carrier	Itinerant operations: General aviation	Itinerant operations: Air taxi military	Itinerant operations: Total itinerant	Local operations: General aviation	Local operations: Military	Local operations: Total local	Total operations
Ann Arbor Municipal	1982	0	0	0	0	0	0	0	0
(Ann Arbor)	1983	0	30,716	394	31,110	42,981	85	43,066	74,176
	%Chg	0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
W.K. Kellogg Regional	1982	6,191	13,906	4,506	24,603	12,157	3,187	15,344	39,947
(Battle Creek)	1983	4,705	16,391	3,881	24,977	15,651	2,608	18,259	43,236
	%Chg	-24.0	17.9	-13.9	1.5	28.7	-18.2	19.0	8.2
Detroit City	1982	2,681	60,084	9,592	72,357	33,266	14	33,280	105,637
(Detroit)	1983	3,020	67,935	13,946	84,901	45,654	113	45,767	130,668
	%Chg	12.6	13.1	45.4	17.3	37.2	707.1	37.5	23.7
Detroit Metropolitan	1982	149,008	55,792	44,338	249,138	0	0	0	249,138
(Detroit)	1983	169,007	60,967	52,267	282,241	0	0	0	282,241
	%Chg	13.4	9.3	17.9	13.3	0.0	0.0	0.0	13.3
Detroit-Willow Run	1982	10,902	43,949	3,932	58,783	79,380	78	79,458	138,241
(Detroit)	1983	13,232	47,058	7,731	68,021	74,815	119	74,934	142,955
	%Chg	21.4	7.1	96.6	15.7	-5.8	52.6	-5.7	3.4
Bishop	1982	262	34,761	13,025	48,048	40,763	697	41,460	89,508
(Flint)	1983	1,733	38,963	13,616	54,312	46,072	785	46,857	101,169
	%Chg	561.5	12.1	4.5	13.0	13.0	12.6	13.0	13.0
Kent County International	1982	23,167	50,465	6,587	80,219	28,058	599	28,657	108,876
(Grand Rapids)	1983	28,823	58,037	6,823	93,683	34,292	900	35,192	128,875
	%Chg	24.4	15.0	3.6	16.8	22.2	50.3	22.8	18.4
Jackson County Reynolds	1982	0	26,494	2,920	29,414	16,227	357	16,584	45,998
(Jackson)	1983	0	29,960	3,740	33,430	21,039	206	21,245	54,675
	%Chg	0.0	13.1	18.8	13.7	29.7	-42.3	28.1	18.9

TABLE XVII-12. ITINERANT, LOCAL AND TOTAL OPERATIONS FOR TOWER AIRPORTS, JANUARY-DECEMBER, 1983 (cont.)

Airport name (community)	Jan thru Dec	Itinerant operations				Local operations			Total operations
		Air carrier	General aviation	Air taxi military	Total itinerant	General aviation	Military	Total local	
Kalamazoo Municipal	1982	6,552	40,347	2,878	49,777	35,964	154	36,118	85,895
(Kalamazoo)	1983	6,952	41,648	6,498	55,098	35,332	202	35,534	90,632
	%Chg	6.1	3.2	125.8	10.7	-1.8	31.2	-1.6	5.5
Capital City	1982	11,433	43,102	9,192	63,727	42,076	6,605	48,681	112,408
(Lansing)	1983	12,845	52,416	9,526	74,787	41,543	6,936	48,479	123,266
	%Chg	12.4	21.6	3.6	17.4	-1.3	5.0	-0.4	9.7
Muskegon County	1982	3,323	24,370	9,657	37,350	20,975	4,034	25,009	62,359
(Muskegon)	1983	6,920	26,218	7,159	40,297	18,846	1,650	20,496	60,793
	%Chg	108.2	7.6	-25.9	7.9	-10.2	-59.1	-18.0	-2.5
Oakland-Pontiac	1982	345	103,791	6,245	110,381	128,009	192	128,201	238,582
(Pontiac)	1983	907	123,814	6,369	131,090	157,418	246	157,664	288,754
	%Chg	162.9	19.3	2.0	18.8	23.0	28.1	23.0	21.0
Tri-City International	1982	8,441	21,329	7,377	37,147	9,500	416	9,916	47,063
(Saginaw)	1983	9,570	22,601	10,143	42,317	12,466	348	12,814	55,131
	%Chg	13.4	6.0	37.5	13.9	31.2	-16.3	29.2	17.1
Cherry Capital	1982	4,526	27,473	8,862	40,861	34,098	7,706	41,804	82,665
(Traverse City)	1983	6,077	27,663	11,769	45,509	32,586	7,622	40,208	85,717
	%Chg	34.3	0.7	32.8	11.4	-4.4	-1.1	-3.8	3.7
Total	1982	226,831	545,863	129,111	901,805	480,473	24,039	504,512	1,406,317
	1983	263,791	644,390	153,592	1,061,773	578,695	21,820	600,515	1,662,288
	%Chg	16.3	18.0	19.0	17.7	20.4	-9.2	19.0	18.2

SOURCE: Michigan Department of Transportation, special release.

TABLE XVII-13. MICHIGAN AIR SERVICE INDICATORS BY CITY AS OF 1 MAY 1983

City/Airport	Daily flights	Daily seats	Non-Stop origins	Carriers
Alpena	4	76	3	1 MQ
Battle Creek	7	350	3	1 ZW
Benton Harbor	3	90	1	1 XV
Cadillac	2	24	1	1 JR
Detroit City	12	290	3	3 FW,GS,UQ
Detroit Metro	320	33,175	56(a)	25 RC,NW,DL,AA,UA,AL,AL-1 EA,OH,ZW,MQ,TW,ML,FW FL,OZ,PA,NY,IU,GS,IW NI,CO,RU,PI,(BA,SN) (b)
Escanaba	9	256	4	1 MQ
Flint	19	665	4	4 IU,AL-1,MQ,PI
Grand Rapids	40	4,412	11(c)	6 RC,UA,DN,AL,NW,PI
Hancock	3	262	1	1 RC
Iron Mountain	5	180	3	1 MQ
Ironwood	4	192	2	1 RC
Jackson	4	76	3	1 MQ
Kalamazoo	19	1,135	5(c)	2 RC,MQ
Lansing	30	1,947	10	5 RC,UA,MQ,DN,PI
Mackinac Island (d)	3	24	1	1 QQ
Manistee	4	32	2	1 JR
Marquette	10	517	5	2 RC,MQ
Menominee	5	95	2	1 MQ
Muskegon	20	943	7	3 RC,IU,ZW
Pellston	6	309	3	2 RC,QQ
Saginaw	25	1,645	10	3 RC,UA,MQ
Sault Ste Marie	3	57	2	1 MQ
Traverse City	26	1,208	9	3 RC,MQ,IU
TOTAL	583	47,960	151	30 RC,MQ,NW,UA,DL,IU,ZW AA,AL,AL-1,OH,DN,FW,QQ EA,TW,ML,NY,FL,OZ,PI JR,PA,IW,GS,NI,CO,RU XV,UQ,(BA,sn) (b)

SOURCE: Michigan Department of Transportation, Bureau of Transportation Planning, Aviation Planning Unit, special release.

a. Detroit Metro has non-stop service to 56 cities serving 60 airports. Cities served with more than one airport include Chicago (O'Hare, Midway), Houston (International, Houston), New York City (Kennedy, Newark, LaGuardia).
b. US Air and Fisher Bros. are differentiated by AL and AL-1 respectively. British (BA) and Sabena (SN) are foreign flag carriers at Detroit Metro. Their one-stop service to Europe is not included in any of the figures above.
c. Both Grand Rapids and Kalamazoo have service to O'Hare and Midway in Chicago.
d. Mackinaw Island Service is seasonal to and from Pellston.

TABLE XVII-14. MICHIGAN AIR SERVICE INDICATORS BY CARRIER AS OF 1 MAY 1983

Carrier	Daily flights	Daily seats	MI cities serviced	Intrastate pairs	Interstate city-pairs
RC - Republic	167	16,895	11	28	34
MQ - Simmons	93	2,090	13	39	6
NW - N.W. Orient	38	5,648	2	2	11
UA - United	33	4,614	4	6	12
ZW - Air Wisconsin	26	1,300	3	4	5
DL - Delta	24	3,563	1	0	11
AL - US Air	24	2,016	2	0	8
IU - Midstate	23	437	4	4	3
AL-1 - Fisher Bros.	21	462	2	2	1
OH - Comair	18	441	1	0	6
AA - American	17	2,922	1	0	3
FW - Wright	16	768	2	0	2
PI - Piedmont	10	1,250	4	0	4
EA - Eastern	10	1,195	1	0	5
GS - Beaver Air	7	42	2	0	3
JR - American Central	6	56	2	2	1
TW - Transworld	5	773	1	0	2
ML - Midway	5	493	1	0	1
QQ - Michigan Airways	5	48	2	2	0
FL - Frontier	4	500	1	0	2
DN - Freedom	4	163	2	2	2
UQ - Sundorph	4	32	1	0	1
PA - Pan American	3	726	1	0	2
CO - Continental	3	321	1	0	2
NY - New York	3	321	1	0	1
OZ - Ozark	3	279	1	0	1
IW - Best	3	258	1	0	3
RU - Britt Airways	3	150	1	0	1
XV - Mississippi Valley	3	90	1	0	1
NI - American Int'l.	1	107	1	0	1
TOTAL	583	47,960	65	91	135

SOURCE: Michigan Department of Transportation, special release.

NOTE: Daily Flights and Seats are arrivals aggregated across Michigan's commercial service airports. Michigan cities served is self-explanatory but the Total represents 65 'carrier cities' at our 24 service airports. Intrastate City pairs are one-way trip city pairs. Interstate city pairs are one-way arrivals from out-of-state. To compare these last two items, either double the interstate city pair figures or halve the intrastate city pair figures.

TABLE XVII-15. MICHIGAN'S TOTAL AIRLINE PASSENGERS BOARDING AT EACH COMMERCIAL SERVICE AIRPORT IN THE STATE: 1972-1982

Principal city served	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	Percentage change 1972-1982
Alpena	.15	.15	.17	.17	.17	.17	.19	.19	.19	.16	.07	- .08
Battle Creek	.28	.19	.35	.39	.41	.50	.47	.44	.41	.37	.39	+ .11
Benton Harbor	.54	.49	.58	.56	.55	.60	.60	.47	.50	.34	.20	- .34
Detroit (City)	.69	.61	.67	.55	.51	.58	.52	.54	.56	.51	.54	- .15
Detroit (Metro)	78.61	78.25	76.78	76.01	75.55	74.49	74.97	75.04	75.60	78.69	80.84	+ 2.23
Escanaba	.30	.27	.28	.28	.29	.31	.31	.27	.29	.29	.35	+ .05
Flint	1.88	2.00	2.06	2.04	2.16	2.35	2.27	2.05	1.84	1.28	.79	- 1.09
Grand Rapids	5.32	5.74	5.72	6.07	6.30	6.61	6.61	7.42	7.66	6.83	6.95	+ 1.63
Houghton	.36	.29	.40	.40	.41	.42	.41	.39	.44	.42	.35	- .01
Iron Mountain	.27	.25	.30	.33	.31	.32	.33	.31	.31	.23	.17	- .10
Ironwood	.19	.18	.18	.18	.17	.15	.16	.15	.20	.17	.14	- .05
Jackson	.13	.16	.19	.17	.16	.18	.16	.13	.12	.09	.04	- .09
Kalamazoo	1.92	1.89	2.02	2.03	2.11	2.11	2.17	1.96	2.06	1.90	1.74	- .18
Lansing	2.86	3.04	3.32	3.55	3.56	3.73	3.62	3.60	3.35	2.72	2.25	- .61
Mainstee	.06	.04	.04	.04	.04	.04	.04	.03	.03	.03	.02	- .04
Marquette	.61	.50	.62	.62	.62	.68	.68	.65	.60	.54	.44	- .17
Menominee	.17	.14	.17	.18	.18	.17	.16	.14	.15	.09	.04	- .13
Muskegon	1.32	1.27	1.38	1.43	1.40	1.40	1.34	1.24	.93	.87	.79	- .53
Pellston	.24	.24	.27	.24	.27	.27	.28	.25	.24	.20	.14	- .10
Saginaw	3.28	3.44	3.52	3.66	3.74	3.79	3.61	3.64	3.33	3.02	2.77	- .51
Sault Ste. Marie	.24	.20	.25	.24	.27	.24	.17	.17	.18	.13	.08	- .16
Traverse City	.57	.65	.74	.85	.82	.89	.92	.94	1.01	1.12	.91	+ .34

SOURCE: Michigan Department of Transportation, Planning Division, special release.

TABLE XVII-16. ANNUAL MASS TRANSIT RIDERSHIP: 1981-1982

Service	1981	1982	Percentage change
Local public transportation	127,078,474	118,276,540	- 6.9
Intercity rail passenger	506,255	504,000	- 0.45
Detroit-Chicago (incl. Detroit-Toledo)	393,278	348,028	-11.5
Port Huron-Chicago	112,977	99,332	-12.1
SEMTA commuter rail	443,973	349,887	-22.1

SOURCE: Michigan Department of Transportation, special release.

TABLE XVII-17. ANNUAL RIDERSHIP AND VEHICLE HOURS FOR EACH LOCAL PUBLIC TRANSPORTATION SYSTEM: 1981 AND 1982

Planning Area	Annual Ridership		Annual vehicle hours	
	1981	1982	1981	1982
Michigan[a]	107,460,240	118,276,540	4,703,432	4,568,985
Metropolitan[b]	98,422,423	89,755,377	2,935,305	2,787,816
SEMTA	12,131,588	11,560,030	746,237	693,280
DDOT	85,533,800	77,394,000	2,052,319	1,962,677
Bedford Twp.	13,697	14,139	8,885	3,182
Birmingham	49,608	24,041	8,382	4,191
Ferndale	55,065	45,396	9,824	8,906
Harper Woods	40,757	40,163	4,429	4,695
Monroe	189,595	173,273	26,843	25,359
Mount Clemens	119,765	129,672	11,774	12,851
Nankin	71,373	151,673	22,478	32,048
Redford Twp.	91,504	90,923	16,119	16,856
Trenton	65,512	66,862	12,788	12,616
Waterford Twp.	60,189	54,642	15,227	11,165
Small Metropolitan	25,018,946	24,776,236	1,162,311	1,098,626
Ann Arbor	2,566,403	2,840,184	161,429	144,268
Battle Creek	1,232,059	927,629	45,871	43,037
Bay County	1,095,681	1,230,000	66,170	83,840
Benton Harbor	143,495	106,876	26,265	17,782
Flint	3,992,906	3,705,657	144,941	130,764
Grand Rapids	5,087,678	5,246,788	205,184	186,075
Jackson	828,528	817,566	64,781	66,781
Kalamazoo	3,383,704	3,073,673	124,642	112,480
Lansing	4,469,388	4,100,001	164,714	151,802
Muskegon	568,234	663,840	36,773	42,039
Port Huron	710,463	640,044	51,253	57,383
Saginaw	939,407	1,423,978	61,937	62,375
Small Community	2,050,878	1,972,809	284,269	283,334
Adrian	122,970	109,002	13,516	12,977
Alma	70,815	61,544	7,101	5,948
Alpena	90,174	89,133	12,487	12,570
Belding	42,633	38,059	4,408	4,398
Big Rapids	155,336	144,363	18,574	18,234
Cadillac	124,696	--	17,277	--
Davison	76,013	67,070	12,612	10,257
Dowagiac	29,468	31,682	5,026	4,747
Eaton Rapids	26,335	31,220	3,764	4,933
Gladwin	36,370	11,495	3,947	3,798
Grand Haven	156,120	125,203	22,482	18,286

TABLE XVII-17. ANNUAL RIDERSHIP AND VEHICLE HOURS FOR EACH LOCAL PUBLIC TRANSPORTATION SYSTEM: 1981 AND 1982 (cont.)

Planning Area	Annual Ridership		Annual vehicle hours	
	1981	1982	1981	1982
Greenville	--	32,763	--	--
Hillsdale	88,424	78,112	10,821	10,529
Holland	116,311	126,645	17,563	19,918
Houghton	--	18,108	--	4,238
Ionia	46,632	50,349	6,192	5,713
Ishpeming	36,286	30,839	4,858	4,872
Ludington	102,976	103,905	10,017	13,099
Marquette	148,172	144,257	11,652	11,657
Marshall	54,674	57,539	6,232	5,995
Midland	142,469	156,122	24,623	25,983
Niles	134,241	115,096	25,768	20,646
Reed City	23,209	23,693	4,526	3,812
Saugatuck	33,807	34,623	5,085	4,966
Sault Ste. Marie	93,152	93,314	14,022	14,468
Traverse City	99,595	82,375	21,716	19,538
Countywide	1,586,227	1,771,918	317,588	390,652
Alger	--	17,829	--	8,993
Antrim	90,496	71,778	21,958	16,473
Arenac	26,582	28,672	6,479	8,692
Baraga	55,237	20,455	10,075	3,754
Barry	--	28,413	--	8,995
Charlevoix	78,944	79,331	16,798	17,266
Crawford	75,701	117,732	12,376	17,403
Eaton	91,139	101,010	11,394	20,348
Chippewa/Luce	58,983	79,632	13,298	14,964
Gladwin	40,674	56,064	5,324	15,482
Gogebic	11,414	33,117	1,956	8,491
Houghton	154,857	58,861	21,591	8,046
Huron/Sanilac	--	119,969	--	32,787
Ingham	603	20,910	930	9,156
Iosco	67,116	70,958	13,106	12,661
Isabella	270,007	185,524	41,466	33,508
Leelanau	--	20,150	--	6,825
Lenawee	84,657	84,637	17,109	16,556
Manistee	157,616	132,811	25,854	22,693
Marquette	--	16,012	--	6,698
Mecosta	66,674	54,208	15,815	11,549
Ogemaw	14,182	34,138	4,886	6,472
Ontonagon	2,228	24,944	2,487	9,742
Oscoda	13,385	23,231	5,880	6,207
Otsego	68,928	70,095	16,262	16,062
Roscommon	43,367	84,850	11,649	14,610
Schoolcraft	47,962	35,110	11,918	9,880
Van Buren	46,987	85,904	12,322	23,197
Yates Twp.	18,578	16,165	6,155	6,172

SOURCE: Michigan Department of Transportation, Mass Transportation Planning Section, special release.

a. The SMETA figures do not include commuter rail as only 1982 figures are reported in this document.
b. SEMTA/DDOT figures include transfers.

TABLE XVII-18. FREIGHT CARRIED ON THE MICHIGAN GREAT LAKES SYSTEM: 1974-1981

(Thousands of ton-miles)

Waterway and year	Domestic				Foreign		Area totals
	Lakewise	Coastwise	Internal	Local and intraport	Canada	Overseas	
Lake Superior							
1974	25,258,380	0	0	74	2,280,306	828,733	28,367,493
1975	21,884,646	0	0	48	2,082,536	1,129,562	25,096,792
1976	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1977	15,454,146	0	0	181	1,616,238	1,529,034	18,599,599
1978	24,617,303	0	0	71	2,646,711	2,686,460	29,950,545
1979	25,692,584	0	0	572	2,845,119	2,184,803	30,723,078
1980	20,359,118	0	0	31	3,179,098	1,687,680	25,225,927
1981	21,485,375	0	0	16	2,945,107	1,539,937	25,970,435
St. Mary's River							
1974	4,581,604	0	0	3	426,591	136,032	5,144,230
1975	4,037,468	0	0	2	408,454	185,397	4,631,321
1976	4,138,670	0	0	3	329,790	163,517	4,631,980
1977	2,817,806	0	0	1	312,514	250,804	3,381,125
1978	4,511,761	0	0	4	450,469	440,943	5,403,177
1979	4,612,771	0	0	1	464,618	358,598	5,435,988
1980	3,618,103	0	0	1	532,626	277,227	4,427,957
1981	3,828,774	0	0	0	475,926	252,999	4,557,699
Lake Huron							
1974	18,811,921	0	1,157	6,121	3,134,382	1,264,626	23,236,207
1975	16,125,686	0	1,333	4,100	3,315,051	1,372,476	20,818,646
1976	17,004,630	0	3,963	4,935	3,962,777	1,548,453	22,424,758
1977	13,135,740	0	8	4,970	3,482,484	2,131,923	18,755,125
1978	17,992,729	0	610	4,658	3,840,447	2,894,635	24,733,079
1979	18,552,490	1,346	303	4,789	4,611,055	2,577,599	25,747,582
1980	14,678,609	49	157	2,993	4,834,673	1,575,443	20,091,924
1981	13,958,715	0	604	3,091	4,153,848	1,477,227	19,593,485

TABLE XVII-18. FREIGHT CARRIED ON THE MICHIGAN GREAT LAKES SYSTEM: 1974-1981 (cont.)

(Thousands of ton-miles)

Waterway and year	Domestic				Foreign		Area totals
	Lakewise	Coastwise	Internal	Local and intraport	Canada	Overseas	
St. Clair[a]							
1974	4,485,771	0	407	288	723,164	308,421	5,518,051
1975	3,817,879	0	308	0	771,777	336,978	4,926,942
1976	3,953,856	0	665	0	863,660	376,761	5,194,942
1977	2,986,684	0	0	0	822,731	519,520	4,328,935
1978	4,101,310	0	141	0	913,248	716,796	5,731,495
1979	4,257,591	312	68	0	1,128,238	636,397	6,022,606
1980	3,345,722	804	0	0	944,938	393,683	4,685,147
1981	3,172,715	0	6	0	1,022,650	369,192	4,564,463
Detroit River							
1974	2,284,291	1,194	273	1,735	454,449	210,510	2,952,452
1975	1,950,195	1,112	268	988	498,614	221,029	2,672,206
1976	2,024,737	1,600	402	794	519,801	253,521	2,800,855
1977	1,529,176	1,159	34	779	520,875	338,756	2,390,779
1978	2,062,537	1,458	114	913	542,028	434,753	3,041,803
1979	2,158,570	1,383	37	390	666,182	387,630	3,214,192
1980	1,703,918	1,651	0	437	566,896	234,782	2,507,684
1981	1,621,194	0	3	133	649,146	222,682	2,493,158
Lake Michigan[b]							
1974	16,105,023	2,419	580,506	90,386	2,248,124	1,004,624	20,031,082
1975	14,366,790	913	555,173	72,047	2,193,957	909,835	18,098,715
1976	14,490,026	1,200	460,620	65,835	3,075,673	1,265,525	19,358,885
1977	11,270,889	1,057	421,172	57,984	2,775,846	1,628,324	16,155,272
1978	16,005,560	897	380,129	76,822	2,443,191	1,740,677	20,647,276
1979	15,266,657	2,491	395,712	72,655	3,121,358	1,661,987	20,520,860
1980	12,178,890	851	455,227	68,523	2,028,203	762,070	15,493,761
1981	12,518,988	536	474,752	48,370	2,460,422	750,830	16,253,898

SOURCE: U.S. Department of the Army, Corps of Engineers, Waterborne Commerce of the United States, Part 3, Waterways and Harbors--Great Lakes, 1974 through 1981 (Vicksburg, Mississippi: annually).

a. Includes St. Clair River and channels in Lake St. Clair.

b. Includes the port of Chicago.

TABLE XVII-19. FREIGHT TRAFFIC ON PRINCIPAL MICHIGAN WATERWAYS: 1975-1981

(In thousands of tons)

Port or waterway	1975	1976	1977	1978	1979	1980	1981
Alabaster	n.a.	561.0	621.7	n.a.	n.a.	389.9	300.1
Alpena Harbor	2,855.6	2,835.5	3,004.9	3,203.7	2,942.1	2,737.0	2,170.7
Calcite	1,645.9	11,313.5	11,985.2	11,699.2	n.a.	7,428.0	7,974.9
Charlevoix	133.1	124.2	42.5	163.2	n.a.	144.5	114.1
Cheboygan	78.9	158.0	158.9	134.8	n.a.	110.5	90.1
Detroit River	100,419.3	104,551.8	90,576.9	113,031.8	118,392.0	92,072.8	90,405.9
Port of Detroit	26,487.9	26,407.9	25,092.8	25,881.5	24,996.0	19,268.4	17,839.1
Detroit Harbor	11,103.2	10,371.6	7,856.8	9,005.9	8,316.3	5,894.6	5,143.2
Rouge River	12,738.1	11,061.9	12,055.8	11,499.3	12,492.1	10,277.3	9,663.8
Ecorse	715.4	635.6	902.0	726.2	316.9	369.8	182.5
Wyandotte	1,497.9	1,584.3	1,442.2	1,290.6	438.9	293.4	334.4
Trenton	3,120.6	3,059.8	3,131.0	3,704.7	3,615.5	2,652.8	2,569.7
Escanaba	10,876.3	11,934.4	9,506.1	13,207.5	n.a.	11,240.6	10,061.7
Frankfort Harbor	644.7	433.1	365.6	542.4	1,397.3	944.5	1,351.2
Gladstone	194.1	261.9	232.7	298.8	n.a.	144.4	185.4
Grand Haven Harbor and Grand River	1,138.1	830.9	499.5	701.7	1,010.0	585.2	430.1
Grays Reef Passage	5,467.9	5,899.4	5,378.7	6,562.5	7,690.7	6,020.6	5,194.8
Holland	338.1	338.7	377.1	419.9	451.5	263.2	264.0
Harbor Beach	283.0	296.5	268.3	253.7	n.a.	180.6	113.7
Keweenaw Waterway	258.2	236.4	264.2	252.1	n.a.	186.7	242.5
Ludington Harbor	2,123.5	2,338.8	2,449.0	2,397.9	2,76.9	2,129.0	1,762.3
Manistee Harbor	220.0	182.5	181.4	183.8	n.a.	185.7	132.3
Marquette Harbor	1,233.3	572.3	394.3	86.9	n.a.	77.3	67.7
Menominee Harbor and River[a]	118.1	105.1	124.2	137.4	n.a.	n.a.	n.a.
Monroe Harbor	1,184.7	972.9	1,321.3	2,374.2	2,662.8	2,768.5	2,782.0
Muskegon Harbor	1,945.3	2,270.8	1,912.4	1,952.5	1,906.7	1,235.3	1,158.5
Petoskey Pen Dixie Harbor	469.0	430.8	485.5	428.9	n.a.	371.9	n.a.

TABLE XVII-19. FREIGHT TRAFFIC ON PRINCIPAL MICHIGAN WATERWAYS: 1975-1981 (cont.)

(In thousands of tons)

Port or waterway	1975	1976	1977	1978	1979	1980	1981
Port Dolomite	3,608.5	3,457.4	3,798.6	3,633.7	n.a.	2,978.9	2,804.6
Port Gypsum	382.1	473.9	500.1	631.3	n.a.	335.9	n.a.
Port Inland	3,248.5	3,361.5	3,469.7	3,585.2	n.a.	3,005.7	2,770.9
Presque Isle Harbor	3,847.0	6,840.6	5,215.3	7,956.9	8,121.7	7,881.3	8,120.0
Saginaw River	2,705.3	3,072.5	3,656.2	3,173.6	4,046.1	3,081.3	2,593.6
St. Clair River	91,711.3	96,360.2	82,750.5	106,868.5	112,691.1	89,010.4	86,824.2
Port Huron	213.6	244.6	325.9	647.1	894.5	695.6	628.4
Marysville	559.7	516.7	575.9	529.9	425.5	614.6	263.8
St. Clair	2,686.5	3,355.1	4,585.1	3,319.8	3,286.4	3,726.3	3,350.7
Marine City	145.7	187.5	250.9	324.7	239.3	281.7	n.a.
Algonac	18.3	0	7.2	23.8	n.a.	n.a.	13.8
Channels in Lake St. Clair	88,954.4	92,441.3	77,647.2	102,197.9	107,708.8	83,914.3	82,294.2
St. Joseph Harbor	245.0	295.1	308.4	320.6	443.9	445.9	429.2
St. Mary's River	78,153.5	78,930.7	58,322.0	90,761.6	91,081.0	74,310.0	76,377.8
St. Mary's Falls	75,225.5	76,739.5	56,302.0	88,634.9	90,499.5	75,048.9	77,022.8
Sault Ste. Marie	86.2	95.6	69.9	62.3	n.a.	52.2	65.2
Lime Island	56.4	84.4	59.8	95.3	n.a.	16.5	7.7
Drummond Island	2,341.1	2,511.4	2,131.6	2,578.4	2,047.0	1,489.3	1,478.8
Detour and vicinity	78.9	14.4	.1	.1	n.a.	.1	32.9
Stoneport	8,533.2	9,766.0	7,991.6	9,217.9	n.a.	7,354.3	6,142.2
Traverse City Harbor	364.8	398.3	430.7	426.2	318.2	323.3	341.1

SOURCE: U.S. Department of the Army, Corps of Engineers, Waterborne Commerce of the United States, Part 3, Waterways and Harbors--Great Lakes, 1975 through 1981 (Vicksburg, MS: annually).

NOTE: Only waterways which had more than 100,000 tons of traffic in 1974 are listed.

a. Michigan and Wisconsin.
n.a.: not available.

TABLE XVII-20. NUMBER OF REVENUE VEHICLES REPORTED BY THE DETROIT & CANADA TUNNEL CORPORATION, DETROIT INTERNATIONAL BRIDGE COMPANY, MACKINAC BRIDGE AUTHORITY, AND INTERNATIONAL BRIDGE AUTHORITY: 1969-1983

Year	Detroit & Canada Tunnel Corporation	Detroit International Bridge Company	Mackinac Bridge Authority	International Bridge Authority
1969	5,921,565	4,204,805	1,836,383	743,076
1970	5,926,789	4,216,764	1,947,862	759,999
1971	5,863,013	4,408,012	2,090,492	780,222
1972	5,681,152	4,616,461	2,174,664	824,878
1973	5,523,499	4,964,444	2,254,439	868,479
1974	5,405,642	4,973,016	2,138,298	865,814
1975	5,202,331	4,980,587	2,285,784	936,890
1976	5,056,690	5,022,711	2,391,211	957,622
1977	4,968,398	5,238,646	2,460,293	1,059,595
1978	5,392,341	4,956,585	2,539,620	1,118,930
1979	5,250,899	5,348,952	2,293,446	1,076,327
1980	5,875,945	5,971,177	2,260,102	1,216,332
1981	6,323,911	5,784,935	2,320,542	1,316,435
1982	5,397,841	5,317,383	2,295,908	1,270,609
1983	5,585,446	5,717,444	2,426,807	1,438,789

SOURCE: Detroit & Canada Tunnel Corporation, special release; Detroit International Bridge Company, special release; Mackinac Bridge Authority, special release; and International Bridge Auhority.

NOTE: The International Bridge Authority links Michigan and Canada at Sault Ste. Marie. Traffic data for the Blue Water Bridge, located at Port Huron and Sarnia, are not available.

TABLE XVII-21. MEANS OF TRANSPORTATION TO WORK, IN MICHIGAN, BY COUNTY: CENSUS 1980

		Percentage					
County	Workers 16 years & older	Drive alone	Carpool	Use public transportation	Walked only	Using other means	Worked at home
Alcona	2,664	62.3	21.7	.7	6.9	2.8	5.3
Alger	3,044	57.3	20.9	.0	15.2	2.0	4.3
Allegan	32,943	69.0	21.0	.1	4.9	1.1	3.6
Alpena	11,333	72.5	15.9	.3	5.3	2.5	3.2
Antrim	5,374	64.1	19.9	1.0	7.8	3.1	3.8
Arenac	4,339	61.5	24.1	.0	7.0	1.2	5.8
Baraga	2,605	58.4	21.3	5.6	8.6	2.0	3.8
Barry	17,995	67.5	23.8	.1	4.2	1.0	3.1
Bay	44,759	74.9	18.5	.8	3.3	.5	1.7
Benzie	3,820	66.0	20.8	.0	7.3	1.4	4.1
Berrien	67,622	72.6	17.9	.3	5.0	1.3	2.5
Branch	15,624	69.5	19.7	.2	4.1	1.3	5.0
Calhoun	55,749	71.7	18.9	1.2	5.0	.8	2.1
Cass	19,097	71.4	19.6	.0	4.1	1.1	3.5
Charlevoix	7,429	65.3	19.8	.1	7.2	3.6	3.7
Cheboygan	6,521	69.0	18.2	.4	7.5	1.7	2.8
Chippewa	9,576	59.1	17.9	1.9	13.2	3.8	3.8
Clare	6,684	64.6	22.4	.2	6.6	1.3	4.6
Clinton	23,218	66.8	24.1	.4	3.7	1.0	3.8
Crawford	3,056	75.3	16.2	.7	5.6	.8	1.0
Delta	13,225	68.7	18.4	.9	6.9	2.1	2.8
Dickinson	9,480	70.2	16.3	.4	8.3	3.0	1.4
Eaton	39,371	70.5	21.1	.6	4.1	.8	2.5
Emmet	9,007	64.1	18.8	.1	11.1	2.1	3.5
Genesee	164,559	78.8	16.0	1.0	2.5	.5	.9

TABLE XVII-21. MEANS OF TRANSPORTATION TO WORK, IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

County	Workers 16 years & older	Percentage					
		Drive alone	Carpool	Use public transportation	Walked only	Using other means	Worked at home
Gladwin	5,635	62.2	26.0	.7	5.3	1.2	4.2
Gogebic	6,190	54.8	22.1	3.7	14.8	2.2	2.1
Grand Traverse	22,946	71.6	17.7	.2	4.5	2.2	3.5
Gratiot	14,941	64.1	20.7	.5	8.0	1.1	5.3
Hillsdale	15,703	69.3	17.9	.3	6.2	.9	5.1
Houghton	11,505	48.5	22.2	1.2	22.8	2.5	2.6
Huron	12,740	60.5	18.1	.2	9.7	1.1	10.0
Ingham	121,948	65.4	17.0	3.9	9.5	2.0	1.9
Ionia	18,234	61.2	27.4	.3	5.8	1.2	3.8
Iosco	9,724	68.4	17.0	.4	7.8	3.2	2.9
Iron	4,169	58.2	17.7	6.1	11.3	.9	5.5
Isabella	20,919	57.6	18.3	.4	18.4	1.2	3.8
Jackson	58,382	74.0	18.1	1.2	3.9	.8	1.8
Kalamazoo	96,157	71.6	16.6	2.7	6.0	1.1	1.7
Kalkaska	3,340	71.3	17.8	.6	4.5	1.7	3.9
Kent	196,123	73.1	17.9	2.2	3.9	1.0	1.6
Keweenaw	493	50.9	22.3	.4	20.2	3.4	2.6
Lake	1,996	62.1	22.5	1.2	9.4	1.5	3.1
Lapeer	25,073	66.9	24.6	.1	3.9	.6	3.6
Leelanau	5,491	65.7	19.3	.1	6.8	1.7	6.1
Lenawee	35,412	70.1	20.0	.3	5.4	1.0	2.9
Livingston	40,101	72.6	21.8	.2	2.2	.7	2.2
Luce	2,210	62.3	18.2	.1	12.1	3.8	3.2
Mackinac	3,069	54.3	21.6	.6	12.1	7.0	4.1
Macomb	297,114	78.4	16.9	1.2	2.0	.4	.8

TABLE XVII-21. MEANS OF TRANSPORTATION TO WORK, IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

County	Workers 16 years & older	Percentage					
		Drive alone	Carpool	Use public transportation	Walked only	Using other means	Worked at home
Manistee	7,624	66.9	18.0	1.5	9.2	1.0	3.2
Marquette	29,244	57.2	24.1	.7	13.7	2.3	1.8
Mason	9,488	69.1	17.6	.8	7.2	1.3	3.6
Mecosta	13,040	55.8	22.6	.6	14.4	1.7	4.7
Menominee	9,571	68.4	17.2	.2	6.1	2.7	5.2
Midland	29,274	73.7	19.6	.6	2.9	.7	2.2
Missaukee	3,213	61.8	19.0	.2	7.2	1.1	10.3
Monroe	50,471	76.7	17.4	.4	2.6	.8	1.8
Montcalm	17,478	62.5	26.1	.1	6.0	1.2	3.8
Montmorency	1,977	66.5	20.2	.2	6.1	3.6	3.2
Muskegon	59,127	75.2	17.8	.9	3.4	1.0	1.5
Newaygo	11,982	62.2	25.6	.2	6.7	.9	4.1
Oakland	453,787	79.9	15.0	1.1	2.1	.5	1.1
Oceana	7,217	59.7	23.9	.0	8.3	1.9	6.0
Ogemaw	4,494	71.5	14.5	.2	5.7	1.5	6.3
Ontonagon	3,187	55.9	24.2	3.2	10.1	1.9	4.3
Osceola	6,250	61.2	23.7	.1	7.7	1.6	5.3
Oscoda	2,001	67.2	18.1	.3	7.3	2.5	4.2
Otesgo	5,369	75.2	14.6	.1	5.1	1.4	3.3
Ottawa	69,480	73.3	18.1	.4	4.6	1.1	2.2
Presque Isle	4,187	67.7	17.4	.2	8.5	2.9	3.0
Roscommon	4,450	69.3	15.6	.2	8.2	1.7	4.6
Saginaw	81,979	77.2	16.6	.3	3.3	.7	1.6
St. Clair	50,171	71.6	20.5	.6	4.2	.8	2.0
St. Joseph	22,476	70.2	19.6	.2	5.2	1.2	3.3

TABLE XVII-21. MEANS OF TRANSPORTATION TO WORK, IN MICHIGAN, BY COUNTY: CENSUS 1980 (cont.)

County	Workers 16 years & older	Percentage					
		Drive alone	Carpool	Use public transportation	Walked only	Using other means	Worked at home
Sanilac	13,535	60.3	20.2	.3	7.9	1.0	10.0
Schoolcraft	2,746	61.1	23.6	.0	9.3	2.0	3.7
Shiawassee	26,902	70.0	21.2	.1	4.7	.8	2.8
Tuscola	19,675	66.9	22.8	.1	5.1	1.0	3.8
Van Buren	24,474	67.2	21.5	.1	5.7	1.2	4.0
Washtenaw	124,947	64.2	16.9	3.8	10.9	1.5	2.3
Wayne	843,481	71.8	17.1	6.4	3.2	.5	.7
Wexford	8,811	68.2	19.7	.6	6.6	1.6	3.0
MICHIGAN	3,630,817	72.4	17.8	2.4	4.4	.9	1.8

SOURCE: Bureau of the Census, 1980 Census of Population and Housing, STF3, computer tape.

XVIII. COMMUNICATIONS

The Federal Communications Commission is the leading source of information in the field. Its publication Statistics of Communications Common Carriers gives much detailed information about telephones, radio, and television in the nation and in various states.

The Broadcasting Yearbook of Broadcasting Publications, Inc., lists a considerable amount of information relating to radio and television stations. This volume includes information by states, the facility involved, advertising rates charged, trading area covered, and so forth. Further information concerning Michigan newspapers is available in the Michigan Newspaper Directory and Rate Book of the Michigan Press Association.

Data on plant and customers of each telephone company are available from the records of the Michigan Public Service Commission in the Michigan Department of Commerce. The PSC is responsible for regulating telephone companies and other public utilities.

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TABLE XVIII-1. NUMBER AND CIRCULATION OF DAILY AND SUNDAY NEWSPAPERS IN MICHIGAN: 1964-1981

(Circulation figures in thousands)

	Daily newspapers		Sunday newspapers	
Year	Number	Net paid circulation	Number	Net paid circulation
1964	53	2,384	11	2,081
1965	53	2,353	11	2,040
1966	54	2,410	11	2,093
1967	54	2,492	11	2,167
1968	54	2,435	12	2,085
1969	55	2,415	12	2,080
1970	56	2,512	13	2,189
1971	55	2,447	13	2,187
1972	55	2,510	14	2,245
1973	55	2,569	14	2,276
1974	55	2,527	14	2,269
1975	52	2,448	15	2,361
1976	53	2,453	14	2,225
1977	52	2,457	14	2,237
1978	52	2,458	17	2,366
1979	52	2,458	17	2,363
1980	52	2,448	15	2,361
1981	52	2,463	15	2,400

SOURCE: Bureau of the Census, Statistical Abstract of the United States, 1965 through 1981 (Washington, D.C.: annually).

TABLE XVIII-2. NUMBER OF COMMERCIAL BROADCAST STATIONS IN MICHIGAN: 1 JANUARY 1964-1981

Year	AM	FM	TV	Total
1964	114	47	16	177
1965	115	51	16	182
1966	116	58	17	191
1967	121	61	17	199
1968	122	67	18	207
1969	124	72	19	215
1970	124	76	20	220
1971	125	78	20	223
1972	125	84	22	231
1973	126	87	21	234
1974	124	92	21	237
1975	n.a.	n.a.	n.a.	n.a.
1976	128	107	24	259
1977	127	116	24	267
1978	127	109	24	260
1979	128	117	24	269
1980	131	122	24	277
1981	n.a.	n.a.	n.a.	n.a.

SOURCE: Bureau of the Census, Statistical Abstract of the United States, 1965 through 1981 (Washington, D.C.: annually).

TABLE XVIII-3. MICHIGAN DAILY NEWSPAPERS: 1983

County	City	Name[a]	Circulation[b]	
			Daily	Sunday
Alpena	Alpena	The Alpena News	12,351	--
Bay	Bay City	The Bay City Times	40,449	45,269
Berrien	St. Joseph	St. Joseph Herald Palladium	36,731	--
	Niles	The Daily Star	5,689	--
Branch	Coldwater	Daily Reporter	6,829	--
Calhoun	Albion	Albion Evening Recorder	3,616	13,466[c]
	Battle Creek	Enquirer	31,240	38,325
	Marshall	Marshall Evening Chronicle	2,327	10,567[c]
Cass	Dowagiac	Dowagiac Daily News	3,110	--
Delta	Escanaba	The Daily Press	10,427	--
Dickinson	Iron Mountain	The Daily News	10,306	--
Emmet	Petoskey	Petoskey News-Review	10,450	--
Genesee	Flint	The Flint Journal	108,437	111,626
Gogebic	Ironwood	Ironwood Daily Globe	9,090	--
Grand Traverse	Traverse City	Traverse City Record Eagle	23,886	--
Hillsdale	Hillsdale	Daily News	8,187	--
Houghton	Houghton	Daily Mining Gazette	12,300	--
Huron	Bad Axe	Huron Daily Tribune	9,998	16,500[d]
Ingham	Lansing	Lansing State Journal	70,314	80,926
Ionia	Ionia	Ionia Sentinel-Standard	7,087	19,030[c]
Isabella	Mt. Pleasant	Morning Sun	11,600	--
Jackson	Jackson	Jackson Citizen Patriot	38,350	41,820
Kalamazoo	Kalamazoo	Kalamazoo Gazette	63,872	72,729
Kent	Grand Rapids	The Grand Rapids Press	130,634	160,504
Lenawee	Adrian	The Daily Telegram	17,249	--
Macomb	Mt. Clemens	Macomb Daily	56,400	--
Manistee	Manistee	Manistee News-Advocate	5,664	--
Marquette	Marquette	The Mining Journal	17,417	--
Mason	Ludington	Ludington Daily News	8,880	--
Mecosta	Big Rapids	The Pioneer	6,433	--
Menominee	Menominee	The Herald-Leader	5,334	--

TABLE XVIII-3. MICHIGAN DAILY NEWSPAPERS: 1983 (cont.)

County	City	Name[a]	Circulation[b]	
			Daily	Sunday
Midland	Midland	Midland Daily News	18,270	14,200
Monroe	Monroe	The Monroe Evening News	26,940	--
Montcalm	Greenville	The Daily News	7,424	--
Muskegon	Muskegon	Muskegon Chronicle	45,587	--
Oakland	Pontiac	The Oakland Press	73,800	80,300
	Royal Oak	The Daily Tribune	41,565	--
Ottawa	Grand Haven	Grand Haven Tribune	9,718	--
	Holland	Holland Sentinel	17,543	--
Saginaw	Saginaw	The Saginaw News	55,705	58,593
St. Clair	Port Huron	The Times Herald	28,285	33,206
St. Joseph	Sturgis	Sturgis Journal	9,062	--
	Three Rivers	Three Rivers Commercial	5,200	--
Shiawassee	Owosso	The Argus Press	15,000	--
Van Buren	South Haven	South Haven Daily Tribune	4,607	12,092[c]
Washtenaw	Ann Arbor	Ann Arbor News	47,562	54,753
	Ypsilanti	The Ypsilanti Press	15,504	18,500
Wayne	Detroit	Detroit Free Press	635,114	788,203
	Detroit	Detroit Legal News	2,363	--
	Detroit	Detroit News	650,683	858,870
Wexford	Cadillac	News	8,673	--

SOURCE: Michigan Press Association, Michigan Newspaper Directory 1983 (Lansing: 1984).

a. This list includes all members of the Michigan Press Association; no information is available for other papers which are not members.
b. Circulation figures are taken from the statement of ownership required by the U.S. Postal Service, Audit Bureau of Circulation, and Certified Audit Circulation.
c. Monday issue circulation.
d. Tuesday issue circulation.

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1983

County	City	Name[a]	Circulation[b]
Alcona	Harrisville	Alcona County Review	3,061
	Lincoln	Alcona County Herald	2,100
Alger	Munising	The Munising News	3,080
Allegan	Allegan	Allegan County News Gazette	6,547
	Fennville	Fenville Herald	1,313
	Plainwell	The Union Enterprise	2,314
	Saugatuck	The Commercial Record	2,332
	Wayland	The Wayland Globe	3,284
Antrim	Bellaire	Antrim County News	4,046
	Central Lake	The Torch	1,971
	Elk Rapids	Town Meeting	1,504
Arenac	Standish	Arenac County Independent	5,886
Baraga	L'Anse	L'Anse Sentinel	4,226
Barry	Freeport	Freeport News	578
	Hastings	Hastings Banner	3,704
	Middleville	Middleville Sun and Caledonia News	1,532
	Nashville	Maple Valley News	3,300
Bay	Bay City	Bay City Democrat and Bay County Legal News	1,037
	Bay City	Bay City Enterprise	2,412
	Bay City	Valley Farmer	2,534
	Pinconning	Pinconning Journal	1,484
Benzie	Frankfort	Benzie Co. Record Patriot	3,166
Berrien	Berrien Springs	The Journal Era	4,705
	Buchanan	Berrien County Record	2,800
	New Buffalo	New Buffalo Times	3,100
	Three Oaks	Galien River Gazette	1,409
	Watervliet	Watervliet Record	1,962
Branch	Bronson	The Bronson Journal	1,949
	Union City	The Register-Tribune	1,130
Calhoun	Albion	Journal of Albion	1,162
	Homer	Homer Index	890
Cass	Cassopolis	Cassopolis Vigilant	1,814
	Edwardsburg	Edwardsburg Argus	1,814
	Marcellus	The Marcellus News	1,481
Charlevoix	Boyne City	Charlevoix County Press	3,285
	Charlevoix	Charlevoix Courier	3,287
Cheboygan	Indian River	Straitsland Resorter	2,600
Clare	Clare	The Clare Sentinel	3,330
	Farwell	Farwell News and Review	6,000
	Harrison	Clare County Cleaver	3,861
Clinton	Dewitt	Dewitt/Bath Review	2,328
	St. Johns	Clinton County News	4,042
Crawford	Grayling	Crawford County Avalanche	3,993
Delta	Gladstone	Delta Reporter	3,600
Dickinson	Norway	Norway Current	1,451
Eaton	Bellevue	Bellevue Gazette	420
	Charlotte	Republican Tribune	3,676
	Grand Ledge	Independent	5,664
	Olivet	Olivet Optic News	226
	Sunfield	The Sunfield Sentinel	1,145

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1983 (cont.)

County	City	Name[a]	Circulation[b]
Genesee	Clio	The Clio Messenger	8,079
	Davison	Davison Index	8,900
	Fenton	Independent	15,335
	Fenton	Tri-County News	23,014
	Flint	Flint-Genesee County Legal News	1,109
	Flint	The Suburban News	26,500
	lushing	Flushing Observer	4,419
	Grand Blanc	Grand Blanc Evening News	7,849
	Mt. Morris	Genesee Co. Herald	7,340
Gladwin	Gladwin	Gladwin County Record & Beaverton Clarion	6,667
Gogebic	Wakefield	The Wakefield News	1,218
Gratiot	Ithaca	Graiot County Herald	6,224
Hillsdale	Camden	The Farmer's Advance	23,769
	Jonesville	The Jonesville Independent	762
Houghton	Calumet	Copper Island Sentinel	2,034
Huron	Harbor Beach	Harbor Beach Times	3,297
	Pigeon	Progress-Advance	2,930
	Sebewaing	Sebewaing Blade-Crescent	3,440
Ingham	East Lansing	Towne Courier	5,339
	Leslie	Leslie Local Independent	1,773
	Mason	Ingham County News	2,790
	Stockbridge	Town Crier	1,279
	Williamston	The Enterprise	2,467
Ionia	Clarksville	Clarksville Record	522
	Lake Odessa	Lake Odessa Wave	1,792
	Portland	Review & Observer	2,712
Iosco	East Tawas	Iosco County News	8,770
	Oscda	Press	6,151
Iron	Crystal Falls	The Diamond Drill	3,075
	Iron River	Reporter	4,611
Isabella	Shepherd	The Shepherd Argus	962
Jackson	Brooklyn	The Exponent	9,442
	Hanover	Hanover Horton Local	458
	Jackson	The Blazer & Shoppers Express	12,000
	Jackson	County Legal News	1,428
	Parma	The Parma News	699
	Springport	Springport Signal	900
Kalamazoo	Climax	The Climax Crescent	735
	Galesburg	The Argus	466
	Portage	Herald Headliner	14,500
	Richland	Richland Journal	659
	Vicksburg	Commercial-Express	1,886

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1983 (cont.)

County	City	Name[a]	Circulation[b]
Kalkaska	Kalkaska	Leader and Kalkaskian	3,244
	East Grand Rapids	Cadence	5,600
	Lowell	The Grand Valley Ledger	2,476
	Sparta	North Kent Advance	16,000
	Walker	Walker/Westside Advance	25,500
Lake	Baldwin	Lake County Star	3,173
Lapeer	Almont	Almont Times-Herald	7,338
	Imlay City	Tri-City Times	7,338
	Lapeer	Lapeer County Press	21,796
Leelanau	Leland	The Leelanau Enterprise	5,933
Lenawee	Blissfield	Advance	2,762
	Clinton	Clinton Local	1,215
	Hudson	Hudson Post-Gazette	1,986
	Morenci	The Morenci Observer	4,980
	Tecumseh	The Tecumseh Herald	5,130
Livingston	Brighton	Argus	7,442
	Fowlerville	Fowlerville Review	5,225
	Hartland	Hartland Herald	6,875
	Howell	Livingston County Press	9,602
	Pickney	Pickney Post	6,875
Luce	Newberry	Newberry News	3,130
Mackinac	St. Ignace	St. Ignace News	5,834
Macomb	Armada	Armada Times	1,168
	New Baltimore	Anchor Bay Beacon	8,012
	Richmond	The Review	10,080
	Romeo	The Romeo Observer	4,708
	Romeo	Romeo/Washington Twshp. Advisor	6,800
	St. Clair Shores	St. Clair Shores-Roseville-East Detroit Comm. News	41,500
	Sterling Heights	Sterling Heights Source-North	13,968
	Sterling Heights	Sterling Heights Source-South	14,119
	Sterling Heights	Sterling Heights Advisor	38,600
	Utica	Fraser-Clinton Township Advisor	23,300
	Utica	Utica/Shelby Township-Advisor	38,600
	Warren	Warren-Centerline Comm. News	38,400
	Warren	Warren-Macomb Reporter	21,000
Manistee	Bear Lake	Manistee County Pioneer Press	1,950
Menominee	Stephenson	Menominee County Journal	3,849
Missaukee	Lake City	Lake City Waterfront	4,174
Monroe	Carleton	The Carleton Messenger	789
	Dundee	Dundee Reporter	1,950
	Lambertville	Journal Herald	18,000
	Petersburg	Petersburg Sun	1,950

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1983 (cont.)

County	City	Name[a]	Circulation[b]
Montcalm	Carson City	The Carson City Gazette	1,918
	Howard City	Howard City Record	980
	Lakeview	Lakeview Enterprise	3,659
Montmorency	Atlanta	Montmorency County Tribune	4,815
Muskegon	Norton Shores	The Examiner	12,000
Newaygo	Fremont	Fremont Times-Indicator	9,741
Oakland	Birmingham	Eccentric	20,200
	Clarkston	Clarkston News	3,877
	Clarkston	The Reminder	11,000
	Farmington	Farmington Observer	15,385
	Ferndale	Legal Advisor-Oakland County	1,087
	Holly	Herald Advertiser	1,810
	Lake Orion	Lake Orion Review	3,134
	Milford	Milford Times	5,374
	Milford	Milford-Highland Spinal Column	11,175
	Novi	Novi-Commerce Spinal Column	14,615
	Novi	Novi-Walled Lake News	5,218
	Oxford	The Oxford Leader	2,912
	Pontiac	Oakland County Legal News	1,333
	Rochester	The Rochester Clarion	7,845
	Rochester	The Rochester Eccentric	7,511
	Southfield	The Southfield Eccentric	15,930
	South Lyon	Herald	5,020
	Troy	The Eccentric	8,657
	Troy	Oakland Reporter	24,000
	Union Lake	Spinal Column Newsweekly	15,200
	West Bloomfield	The Eccentric	4,406
	West Bloomfield	West Bloomfield Spinal Column	10,000
Oceana	Hart	Oceana's Herald-Journal	6,173
Ogemaw	West Branch	Ogemaw County Herald	5,358
Ontonagon	Ontonagon	Ontonagon Herald	3,049
Osceola	Evart	Evart Review	2,517
	Marion	The Marion Press	1,467
	Reed City	Osceola County Herald	3,339
Oscoda	Mio	Oscoda County Herald	3,915
	Mio	Oscoda County News	2,665
Otsego	Gaylord	The Herald-Time	5,582
	Coopersville	Ottawa Advance	9,000
	Grand Haven	Tri-Cities Advance	16,000
	Jenison	Grand Valley Advance	18,000
	Zeeland	Zeeland Record	1,777

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1983 (cont.)

County	City	Name[a]	Circulation[b]
Presque Isle	Onaway	Onaway Outlook	2,363
	Rogers City	Presque Isle County Advance	4,020
Roscommon	Houghton Lake	Houghton Lake Resorter	6,356
	Roscommon	Roscommon Herald-News	3,851
Saginaw	Bridgeport	Birch Run Weekly News	9,700
	Chesaning	The Courier	6,100
	Chesaning	St. Charles Valley News	5,100
	Frankenmuth	Frankenmuth News	4,325
	Saginaw	The Saginaw Press	1,085
	Saginaw	The Township Times	6,655
St. Clair	Algonac	The Courier-Journal	8,873
	Capac	Capac Journal	7,338
	Marine City	St. Clair County Independent Press	8,873
	Yale	Yale Expositor	2,315
St. Joseph	Colon	The Express	1,053
Sanilac	Brown City	The Brown City Banner	2,230
	Croswell	Jeffersonian Advisor	6,100
	Deckerville	Deckerville Recorder	1,870
	Marlette	Marlette Leader	2,117
	Minden City	Minden City Herald	1,472
	Sandusky	The Tribune	3,979
	Sandusky	Sanilac County News	4,200
Schoolcraft	Manistique	Pioneer-Tribune	3,572
Shiawassee	Durand	The Durand Express	2,455
	Perry	Shiawassee County Journal	1,128
Tuscola	Caro	Tuscola County Advertiser	13,189
	Cass City	Cass City Chronicle	3,790
	Mayville	Mayville Monitor	1,313
	Millington	Millington Herald-Lakeville Aerial	2,829
	Vassar	Pioneer Times	2,983
Van Buren	Decatur	Decatur Republican	1,850
	Paw Paw	The Courier-Leader	3,222
Washtenaw	Chelsea	Chelsea Standard	3,725
	Dexter	The Dexter Leader	1,881
	Manchester	The Manchester Enterprise	1,583
	Milan	Booster-Leader	2,608

TABLE XVIII-4. MICHIGAN WEEKLY AND SEMIWEEKLY NEWSPAPERS: 1983 (cont.)

County	City	Name[a]	Circulation[b]
Wayne	Allen Park	The Allen Parker	11,425
	Belleville	Belleville Enterprise	5,300
	Canton Twp.	Canton Eagle	7,000
		Canton Observer	8,807
	Dearborn	Dearborn Press & Guide	20,983
	Dearborn Heights	Dearborn Heights Leader	10,079
	Ecorse	Ecorse Advertiser	12,800
		Ecorse Enterprise	1,000
	Flat Rock	The Guardian	5,200
	Garden City	Garden City Observer	8,960
	Grosse Ille	The Downriver News-Herald	42,000
	Grosse Ille Twp.	The Ille Camera	2,746
	Grosse Pointe	Grosse Pointe News	17,100
	Hamtramck	The Citizen	12,453
	Inkster	Inkster Ledger Star	3,200
	Lincoln Park	The Lincoln Parker	20,325
	Livonia	Livonia Observer	26,635
	Melvindale	Melvindale Messenger	3,850
	Northville	Record	5,188
	Plymouth	The Community Crier	20,881
		Plymouth Observer	9,298
	Redford	Redford Observer	11,001
	River Rouge	River Rouge Herald	12,800
	Riverview	The Riverview News-Herald	42,000
	Rockwood	The Pulse Weekly News and Woodhaven Progress	11,000
	Romulus	Romulus Roman	5,260
	Southgate	The Southgate Sentinel	8,950
	Taylor	The Taylor Tribune	18,375
	Trenton	Trenton News-Herald	42,000
		Trenton Times	7,600
	Wayne	Wayne Eagle	6,450
	Westland	Westland Eagle	18,300
		Westland Observer	9,956
	Woodhaven	The News-Herald	42,000
	Wyandotte	Wyandotte News Herald	42,000

SOURCE: Michigan Press Association, Michigan Newspaper Directory and Rate Book, 1984.

a. This list includes all members of the Michigan Press Association; no information is available for other papers which are not members.
b. Circulation figures are taken from the statement of ownership required by the U.S. Postal Service, Audit Bureau of Circulation, and Certified Audit Circulation.

TABLE XVIII-5. BUSINESS AND RESIDENCE TELEPHONES IN MICHIGAN AND THE UNITED STATES: YEARS ENDED 31 DECEMBER 1962-1981

	Michigan				United States			
Year	Business	Residential	Total	Percentage of households with service[a]	Business	Residential	Total	Percentage of households with service[a]
1962	884,800	2,620,700	3,505,500	87	22,702,500	58,269,200	80,971,700	80
1963	914,200	2,726,300	3,640,500	88	23,609,400	60,840,900	84,450,300	81
1964	972,700	2,862,000	3,834,700	91	24,716,600	64,070,800	88,787,400	83
1965	1,020,400	3,044,600	4,065,000	93	26,008,300	67,650,500	93,658,800	85
1966	1,083,900	3,217,100	4,301,000	94	27,413,500	71,372,100	98,785,600	98
1967	1,139,900	3,368,000	4,507,900	94	28,929,300	74,822,600	103,751,900	88
1968	1,198,600	3,512,800	4,711,400	93	30,356,100	78,899,500	109,255,600	89
1969	1,265,800	3,691,500	4,957,300	95	32,220,600	82,980,100	115,200,700	90
1970	1,307,900	3,826,800	5,134,700	95	33,304,800	86,850,000	120,221,000	92
1971	1,332,400	4,012,200	5,344,600	97	34,444,900	90,695,900	125,140,800	93
1972	1,393,000	4,193,000	5,586,000	95	35,989,500	95,613,000	131,602,500	92
1973	1,440,927	4,419,084	5,860,011	98	37,434,884	100,853,505	138,228,389	94
1974	1,487,568	4,577,214	6,064,782	98	38,748,513	105,222,939	143,971,452	94
1975	1,490,220	4,761,455	6,251,675	98	39,497,650	109,510,153	149,007,803	94
1976	1,548,286	4,977,160	6,525,446	99	40,682,411	114,490,857	155,173,288	95
1977	1,611,508	5,157,834	6,769,342	100	42,319,549	119,752,597	162,072,146	96
1978	1,654,291	5,326,848	6,981,139	100	44,284,209	124,742,739	169,026,948	97
1979	1,730,220	5,514,554	7,244,774	101	45,951,980	129,583,132	175,535,112	98
1980	1,737,373	5,567,635	7,305,008	99	47,213,748	133,210,275	180,424,023	96
1981	1,727,161	5,526,140	7,253,301	98	47,780,076	134,111,520	181,891,596	96

SOURCE: Federal Communications Commission, _Statistics of Communications Common Carriers_, (Washington, D.C.: annually), Table 6 (1981).

a. Households with service are the sum of residence main, apartment house PBX and residence service main telephones, and other residence PBX systems. There tends to be a slight overstatement of the proportion of households with telephone service.

TABLE XVIII-6. SELECTED DATA OF CLASS A TELEPHONE CARRIERS IN MICHIGAN: YEARS ENDED 31 DECEMBER 1962-1981

Year	Miles of wire in cable (1,000)	Miles of aerial wire (1,000)	Miles of radio relay system	Central offices	Number of calls originating from company and service telephones[a] (millions)	
					Local	Toll
1962	15,830	367	1,657	661	5,412	171
1963	16,534	360	1,749	667	5,704	186
1964	17,686	337	1,803	705	6,009	306
1965	19,062	318	2,048	712	6,450	235
1966	20,841	308	2,206	725	6,755	264
1967	23,032	288	2,191	805	7,220	295
1968	25,217	264	2,280	817	7,441	333
1969	27,503	226	2,432	833	7,956	351
1970	29,510	184	2,421	837	8,324	383
1971	31,279	157	2,588	848	8,887	407
1972	33,273	128	2,335	862	9,278	566
1973	35,825	108	2,801	883	9,672	676
1974	38,416	97	2,853	903	10,113	699
1975	40,691	76	3,473	926	10,116	976
1976	42,532	61	2,939	934	10,615	1,055
1977	44,328	52	2,362	941	11,105	1,186
1978	46,438	39	2,324	954	11,752	1,238
1979	48,869	33	2,357	959	12,080	1,286
1980	50,743	27	2,917	972	12,470	1,328
1981	52,941	24	2,648	981	13,191	1,476

SOURCE: Federal Communications Commission, Statistics of Communications Common Carrier, (Washington, D.C.: annually), Table 8 (1981).

a. Partly estimated.

TABLE XVIII-7. NUMBER OF TELEPHONE MAIN STATIONS IN MICHIGAN AT YEAR END: 1978-1982

Company	Main office	1978	1979	1980	1981	1982
Alba[a]	Alba	444	497	550	586	271
Allendale	Allendale	2,798	2,960	2,991	3,045	3,014
Au Gres	Au Gres	1,920	2,075	2,159	2,212	2,193
Augusta[b]	Augusta	1,270	1,370	1,360	1,338	1,325
Banfield	Banfield	1,008	1,002	1,028	--	--
Baraga	Baraga	1,595	1,542	1,582	1,597	1,585
Barry County	Delton	3,461	3,668	3,733	4,849	4,850
Blanchard Tel. Assn., Inc.	Blánchard	843	865	875	888	873
Bloomingdale	Bloomingdale	1,129	1,181	1,207	1,211	1,242
Camden	Camden	4,105	4,150	4,179	4,232	4,121
Carr	Branch	758	821	841	888	929
Central[c]	Chesaning	14,771	15,178	15,482	15,773	15,953
Chatham	Chatham	1,937	2,003	2,033	2,088	2,078
Chippewa County	Brimley	648	619	743	675	691
Clayton	Clayton	541	554	563	546	562
Climax	Climax	754	799	814	829	823
Concord	Concord	1,345	1,352	1,349	1,325	1,318
Continental	Pinconning	32,347	33,704	34,772	34,810	33,156
Deerfield Farmers	Deerfield	2,035	2,112	2,122	2,028	2,025
Drenthe	Drenthe	474	466	487	486	486
Drummond Island	Drummond	956	1,062	1,163	1,234	1,289
Farmers Mutual	Chapin	480	486	497	543	262
General	Main	417,929	431,712	439,990	439,914	n.a.
	PBX	52,615	53,532	56,589	57,393	33,716
Hadley	Hadley	905	969	983	1,005	1,030
Hickory	Hickory Corners	990	1,023	1,054	1,064	146
Island	Bois Blanc	313	333	364	373	417
Kaleva	Kaleva	1,363	1,418	1,428	1,459	1,541
Kingsley	Kingsley	1,541	1,584	1,644	1,667	1,696
Lennon	Lennon	1,366	1,422	1,475	1,495	1,423
Mesick[f]	Mesick	1,579	1,586	1,582	1,676	--
Michigan Bell	Main	3,038,858	3,137,272	3,135,488	3,118,904	3,048,294
	PBX	712,685	729,627	738,547	745,431	742,190
Mid-Michigan Tel. Corporation	Stockbridge	28,886	30,958	31,167	31,952	33,535
Midway	Watton	656	685	685	697	684
Midwest[c]	Chesaning	--	--	--	--	--

TABLE XVIII-7. NUMBER OF TELEPHONE MAIN STATIONS IN MICHIGAN AT YEAR END: 1978-1982 (cont.)

Company	Main office	1978	1979	1980	1981	1982
Munising	Munising	3,051	3,074	3,115	3,175	3,186
New Morenci Home	Morenci	1,623	1,639	1,596	1,655	1,456
Northern	Chesaning	791	779	761	821	--
Ogden Mutual	Blissfield	402	393	386	384	389
Ontonagon County	Ontonagon	3,345	3,437	3,537	3,698	3,552
Parma[d]	Parma	1,532	--	--	--	--
Peninsula	Old Mission	717	742	741	759	788
Pigeon	Pigeon	1,166	1,184	1,197	1,186	1,795
Public Service[c]	Chesaning	--	--	--	--	--
Sand Creek	Adrian	978	977	982	982	949
Shiawassee	Perry	3,439	3,602	3,692	3,711	3,729
Southern	Brooklyn	8,735	9,154	9,243	9,220	9,275
Springport	Springport	1,318	1,346	1,337	1,327	1,312
Twining	Twining	400	411	404	396	389
United[b]	Augusta	--	--	--	--	--
Upper Peninsula	Carney	2,119	2,199	2,267	2,542	2,504
Waldron	Waldron	419	436	550	557	540
Westphalia	Westphalia	692	705	710	718	714
Winn	Winn	450	459	459	477	469
Wolverine	Millington	5,984	6,188	6,294	6,319	6,277
Ace[f]		--	--	--	2,614	2,654
Amberg[e]		1,054	n.a.	--	--	--
Niagara[e]		2,573	n.a.	--	--	--

SOURCE: Michigan Public Service Commission, special release; and Michigan Independent Telephone Association, special release.

NOTE: General Telephone Company of Indiana, General Telephone Company of Ohio, and General Telephone Company of Wisconsin also have exchanges in Michigan.

a. Alba merged into Pigeon.
b. United changed name to Augusta.
c. Midwest and Public Service merged into Central.
d. The Parma Telephone Company merged with the Mid-Michigan Telephone Corporation and is operated as a separate exchange of that company.
e. Headquartered in Wisconsin. Amberg had telephones in Goodman and Pembrine; Niagara in Aurora, Florence, Niagara, and Spread Eagle.
f. Mesick merged with Northern, which was bought by Ace.
n.a.: not available.

XIX. ENERGY PRODUCTION AND CONSUMPTION

The Energy Administration, Michigan Department of Commerce, has developed data on energy usage and prospects for the state, in total and by type. The U.S. Department of Energy is another source of broad energy statistics. Consumption of motor fuels is estimated by the U.S. Highway Administration on the basis of motor fuel tax receipts. The Michigan Public Service Commission publishes financial statistics on the operations of natural gas distribution and electric utilities. The Federal Power Commission is a leading source of data on the physical aspects of electricity production. The American Gas Association publishes data on gas utilities in its annual Gas Facts.

Consumption of fuels for heat and power is a regular feature of the Census of Manufactures, conducted twice each decade. The Housing Census yields information about the kinds of fuel used for space and water heating and cooking.

Related data on oil and gas wells and natural gas processing appear in chapter XIII. A list of oil refineries in the state is presented in chapter XV.

Data on the plant and consumer of each electric and gas distribution utility are available from the records of the Michigan Public Service Commission in the Michigan Department of Commerce. The PSC is responsible for regulating public utilities.

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TABLE XIX-1. PER CAPITA AND TOTAL ENERGY CONSUMPTION IN MICHIGAN AND THE UNITED STATES: 1961-1981

	Per capita (Million BTU)		Total (Trillion BTU)		Michigan as a percentage of United States	
Year	Michigan	United States	Michigan	United States	Per capita	Total
1961	237	244	1,878.1	44,722.8	97	4.2
1962	250	252	1,989.3	46,797.7	99	4.2
1963	259	258	2,094.0	48,605.3	100	4.3
1964	262	266	2,150.9	50,775.6	99	4.2
1965	274	274	2,288.9	52,989.1	100	4.3
1966	288	296	2,448.1	55,992.1	101	4.4
1967	291	293	2,507.7	57,891.8	99	4.3
1968	304	308	2,646.0	61,323.3	99	4.3
1969	314	321	2,757.1	64,529.0	98	4.3
1970	308	328	2,736.5	66,828.1	94	4.1
1971	317	331	2,844.0	68,299.7	96	4.2
1972	332	344	2,995.7	71,627.8	97	4.2
1973	339	355	3,078.5	74,602.5	95	4.1
1974	321	344	2,925.9	72,755.1	93	4.0
1975	314	332	2,858.8	70,709.5	95	4.0
1976	327	347	2,974.7	74,509.3	94	4.0
1977	314	353	2,871.8	76,335.5	89	3.8
1978	318	358	2,925.7	78,186.3	89	3.7
1979	315	359	2,901.6	78,903.1	88	3.7
1980	299	334	2,754.3	76,021.8	90	3.6
1981	280	325	2,589.0	74,013.9	86	3.5

SOURCE: Developed from the Energy Information Administration, U.S. Department of Energy, Federal Energy Data System (FEDS) Statistical Summary Update, (Washington, D.C.: U.S. Government Printing Office, 1982), Table 1; and Table I-2; and Michigan Energy Data, Energy Information Administration, U.S. Department of Energy (Washington, D.C.), 1983.

TABLE XIX-2. ENERGY CONSUMPTION BY ENERGY TYPE, MEASURED IN TRILLIONS OF BRITISH THERMAL UNITS, IN MICHIGAN FOR SELECTED YEARS: 1960-1981

Type	1960	1965	1970	1975	1979	1980	1981
Coal	671.0	851.6	858.6	758.9	758.7	738.5	736.9
Natural gas (dry)	383.0	573.6	834.2	902.2	892.1	886.2	821.1
Petroleum, total	736.7	809.8	983.3	1,101.6	1,060.6	937.1	840.6
Asphalt	18.7	13.7	24.8	25.5	27.6	23.1	15.1
Aviation gasoline	6.4	8.0	2.8	1.7	1.9	2.3	1.4
Distillate fuel	176.2	176.4	222.2	245.6	182.1	161.0	155.1
Jet fuel	18.4	24.1	41.1	32.3	37.1	37.1	34.3
Kerosene	23.1	33.3	17.7	7.6	8.7	7.0	5.6
LPG	11.3	14.9	23.4	27.8	27.7	24.7	23.4
Lubricants	15.1	18.3	19.1	16.7	22.3	19.9	19.0
Motor gasoline	345.6	410.0	508.7	568.7	568.7	509.7	487.4
Residual fuel	74.8	54.0	63.2	115.0	119.7	83.6	49.2
Road oil	0.8	1.3	0.9	0.3	0.1	0.2	0.1
Other petroleum	46.3	55.6	59.3	60.4	64.8	68.6	50.1
Nuclear power	0.0	2.1	4.1	79.0	161.1	173.3	186.2
Hydroelectric power	35.3	14.6	13.7	14.9	13.6	71.5	58.3
Geothermal power	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wood and waste	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net interstate sales of electricity	31.9	39.3	42.7	5.9	1.6	-52.3	-54.0
Total energy consumed	1,857.9	2,291.1	2,736.6	2,862.5	2,887.8	2,754.3	2,589.0

SOURCE: Energy Information Administration, U.S. Department of Energy, Michigan Energy Data, (Washington, D.C.: June 1983).

TABLE XIX-3. PER CAPITA ENERGY CONSUMPTION IN MICHIGAN AND UNITED STATES: 1960, 1970, AND 1980 (cont.)

	Consumption per capita (thousands of BTU)					
	Michigan			United States		
Item	1960	1970	1980	1960	1970	1980
By end use sector w/out and with electricity distributed						
Residential without	43	55	51	33	39	30
with	57	77	79	46	66	67
Commercial without	15	21	25	17	21	18
with	25	38	46	27	41	47
Industrial without	86	92	68	91	109	92
with	105	125	107	113	142	134
Transportation without	49	67	67	58	79	86
with	49	67	67	58	79	87
Energy input at electric utilities	38	68	93	46	80	108
Electricity exchanged across state borders: Net	4	5	-5	--	--	--
Electricity sales	12	21	26	13	23	31
Associated losses	30	51	62	33	57	76
TOTAL ENERGY CONSUMED	235	308	299	245	328	334

SOURCE: Developed form Energy Information Administration, U.S. Department of Energy, Federal Energy Data System (FEDS) Statistical Summary Update (Washington, D.C.: U.S. Government Printing Office, 1982 Tables 1, 3, 4, 5, and 6.

TABLE XIX-4. MICHIGAN ENERGY CONSUMPTION, IN TRILLIONS OF BRITISH THERMAL UNITS, BY FUEL TYPE: 1961-1981

	Fossil fuels			Electricity			
Year	Coal	Natural gas	Petroleum products	Nuclear power	Hydro electricity	Imported electricity[a]	Total
1961	653.7	422.6	735.1	0.0	31.6	35.1	1,878.1
1962	714.8	459.2	758.8	0.0	18.7	37.8	1,989.3
1963	779.7	479.3	779.9	1.5	9.7	43.8	2,094.0
1964	800.9	515.3	779.8	2.3	12.3	40.4	2,150.9
1965	851.6	573.6	806.3	2.1	14.6	40.7	2,288.9
1966	921.3	636.6	845.1	4.0	18.4	22.6	2,448.1
1967	893.3	708.1	866.6	5.8	20.8	13.1	2,507.7
1968	959.9	722.3	916.6	4.8	17.4	25.1	2,646.0
1969	935.1	800.6	960.1	4.4	15.4	41.5	2,757.1
1970	858.6	834.2	982.9	4.1	13.7	43.1	2,736.5
1971	875.4	876.9	1,021.6	4.2	24.0	41.9	2,844.0
1972	876.8	888.1	1,103.5	22.9	44.6	59.7	2,995.7
1973	819.4	939.0	1,148.7	32.5	48.0	90.8	3,078.5
1974	726.6	958.4	1,103.3	4.6	50.4	82.5	2,925.9
1975	758.9	902.2	1,100.4	79.0	14.9	3.4	2,858.8
1976	722.9	905.1	1,169.3	109.4	39.7	28.4	2,974.7
1977	693.9	755.7	1,204.3	110.2	73.5	34.3	2,871.8
1978	674.1	802.9	1,251.5	143.4	80.9	-27.1	2,925.7
1979	758.7	892.1	1,075.1	161.1	13.6	1.0	2,901.6
1980	738.5	886.2	937.1	173.3	71.5	-52.3	2,754.3
1981	736.9	821.1	840.6	186.2	58.3	-54.0	2,589.0

SOURCE: Michigan Department of Commerce, Energy Information Administration, *State Energy Data Report 1960 through 1980*, July 1982; and *Michigan Energy Data*, Energy Information Administration, U.S. Department of Energy (Washington, D.C.), 1983.

a. Includes associated eletrical energy losses. A positive interstate exchange indicates more electrical energy was transferred into the state than out of the state. A negative interstate exchange indicates more electrical energy was transferred out of the state than into the state.

TABLE XIX-5. MICHIGAN ENERGY CONSUMPTION IN TRILLIONS OF BRITISH THERMAL UNITS BY THE RESIDENTIAL SECTOR: 1961-1981

Year	Coal	Natural gas	Petroleum products	Electricity sales	Electrical[a] energy losses	Total
1961	23.4	225.7	114.2	31.3	76.6	471.2
1962	22.8	242.7	117.1	32.6	78.5	493.7
1963	19.8	250.4	114.9	34.0	81.3	500.4
1964	15.8	259.0	109.1	36.1	85.9	505.9
1965	17.7	279.7	111.8	38.6	92.1	539.9
1966	18.3	296.3	114.2	42.1	100.9	571.7
1967	13.6	312.2	123.6	45.1	107.7	602.2
1968	13.1	325.5	127.3	49.6	118.2	633.6
1969	11.3	343.6	126.3	54.0	129.1	664.3
1970	8.8	350.6	129.8	58.4	141.6	689.1
1971	8.9	354.4	142.1	62.0	150.1	717.5
1972	6.3	364.9	152.3	66.2	159.0	748.6
1973	6.5	348.4	147.7	69.1	165.5	737.2
1974	5.3	354.4	136.4	69.2	168.9	734.1
1975	4.1	341.6	134.2	71.3	172.0	723.1
1976	4.2	345.9	134.8	72.8	175.1	732.8
1977	3.6	304.9	133.5	74.1	178.8	694.9
1978	3.2	333.5	135.1	74.6	182.5	728.9
1979	1.6	376.0	80.6	75.2	180.8	714.2
1980	2.9	396.6	66.4	76.0	184.6	726.5
1981	1.9	370.8	57.9	73.5	174.3	678.5

SOURCE: Energy Information Administration, U.S. Department of Energy, Michigan Energy Data and U.S. Energy Data, June 1983.

[a] Incurred in the generation and transmission of electricity plus plant use and unaccounted for electrical energy losses that are attributed to each sector in proportion to the sector's share of total electricity sales in the state.

TABLE XIX-6. MICHIGAN ENERGY CONSUMPTION IN TRILLIONS OF BRITISH THERMAL UNITS BY THE COMMERICAL SECTOR: 1961-1981

Year	Coal	Natural gas	Petroleum products	Electricity sales	Electrical[a] energy losses	Total energy consumed
1961	42.7	44.3	32.8	22.7	55.5	198.0
1962	41.6	66.8	33.5	24.4	58.8	225.1
1963	35.6	70.8	33.5	26.4	63.1	229.4
1964	27.9	76.7	32.5	28.6	68.2	234.0
1965	31.4	87.5	32.7	30.6	73.2	255.5
1966	32.5	98.4	32.1	33.2	79.7	276.0
1967	24.5	111.2	30.1	35.3	84.4	285.7
1968	23.4	120.8	31.4	38.5	91.8	305.7
1969	20.2	134.1	32.6	41.3	98.7	326.8
1970	15.4	136.8	33.3	44.0	106.9	336.4
1971	15.7	150.7	34.8	46.6	112.9	360.8
1972	11.2	164.3	38.3	49.2	118.1	381.0
1973	11.0	183.9	36.6	52.7	126.4	410.6
1974	8.7	193.7	34.2	51.9	126.5	414.9
1975	7.0	185.6	33.1	49.6	119.7	394.9
1976	7.4	181.6	36.0	51.8	124.6	401.4
1977	6.3	133.8	36.5	53.8	129.7	360.0
1978	5.1	145.2	35.4	54.5	133.4	373.7
1979	2.4	185.6	22.0	56.7	136.2	402.9
1980	5.3	194.8	26.2	57.0	138.5	421.8
1981	3.4	179.1	21.2	57.1	135.5	396.3

SOURCE: Energy Information Administration, U.S. Department of Energy, Michigan Energy Data and U.S. Energy Data, June 1983.

a. Incurred in the generation and transmission of electricity plus plant use and unaccounted for electrical energy losses.

TABLE XIX-7. MICHIGAN ENERGY CONSUMPTION IN TRILLIONS OF BRITISH THERMAL UNITS BY THE INDUSTRIAL SECTOR: 1961-1981

Year	Coal	Natural gas	Petroleum products	Indus. Hydro-power	Electricity sales	Electrical[a] energy losses	Total energy consumed
1961	330.7	142.3	205.3	1.6	41.6	101.7	823.2
1962	350.5	145.1	208.3	1.4	47.7	114.9	867.9
1963	393.2	153.3	208.7	1.3	53.3	127.7	937.5
1964	396.0	172.3	197.1	1.4	58.4	139.2	964.5
1965	401.3	198.6	206.5	1.5	66.0	157.7	1,031.5
1966	411.7	232.2	207.9	1.6	73.4	176.2	1,103.0
1967	376.2	270.7	194.7	1.8	74.8	178.5	1,096.7
1968	403.5	260.5	196.1	1.8	82.2	196.1	1,140.3
1969	361.2	298.0	207.1	1.7	88.4	211.0	1,167.2
1970	346.8	269.9	204.5	1.3	85.9	208.4	1,116.8
1971	354.2	283.8	196.5	1.6	93.1	225.4	1,154.7
1972	361.5	281.9	215.6	1.5	101.9	244.7	1,207.2
1973	307.5	330.5	222.7	1.7	112.3	269.0	1,243.8
1974	224.2	328.5	203.3	1.4	103.3	252.0	1,112.6
1975	253.0	306.4	186.4	1.3	98.5	237.7	1,083.3
1976	228.7	310.9	220.5	1.3	113.3	272.7	1,147.4
1977	188.6	272.1	241.8	1.3	117.8	284.2	1,105.8
1978	169.3	282.9	234.8	1.4	121.5	297.2	1,107.2
1979	208.3	278.7	182.7	1.3	120.1	288.8	1,079.8
1980	198.2	254.8	172.4	1.2	104.6	254.3	985.5
1981	181.7	237.3	139.0	1.2	105.3	249.9	914.4

SOURCE: Energy Information Administration, U.S. Department of Energy, Michigan Energy Data, June 1983.

a. Incurred in the generation and transmission of electricity plus plant use and unaccounted for electrical energy losses.

TABLE XIX-8. MICHIGAN ENERGY CONSUMPTION IN TRILLIONS OF BRITISH THERMAL UNITS BY THE TRANSPORTATION SECTOR: 1961-1981

Year	Coal	Natural gas	Petroleum products	Electricity sales	Electrical[a] energy losses	Total energy consumed
1961	1.5	1.8	385.4	0.4	1.1	390.2
1962	1.4	1.9	400.6	0.5	1.1	405.5
1963	1.5	2.7	423.0	0.5	1.1	428.8
1964	1.5	4.7	441.0	0.5	1.2	449.0
1965	1.3	4.7	456.5	0.5	1.2	464.1
1966	1.2	7.1	485.8	0.5	1.1	495.8
1967	0.9	9.1	509.6	0.4	1.1	521.1
1968	0.9	8.5	554.2	0.4	1.0	565.0
1969	0.6	9.0	585.7	0.4	0.9	596.7
1970	0.6	10.7	581.7	0.4	1.0	594.3
1971	0.5	15.9	591.6	0.4	1.0	609.4
1972	0.4	16.6	642.9	0.3	0.8	661.0
1973	0.2	12.3	675.3	0.3	0.8	688.9
1974	0.1	11.2	654.4	0.4	0.9	667.0
1975	(b)	10.4	650.0	0.2	0.5	661.2
1976	(b)	12.0	684.6	0.2	0.5	697.4
1977	(b)	11.8	699.6	0.2	0.5	712.2
1978	0.0	3.6	719.4	0.2	0.5	723.7
1979	0.0	12.6	677.5	0.2	0.6	690.9
1980	0.0	12.7	607.0	0.2	0.6	620.5
1981	0.0	14.0	584.9	0.3	0.7	599.9

SOURCE: Energy Information Administration, U.S. Department of Energy, Michigan Energy Data and U.S. Energy Data, June 1983.

a. Incurred in the generation and transmission of electricity plus plant use and unaccounted for electrical energy losses.
b. Represents: small, non-zero value.

TABLE XIX-9. MICHIGAN CONSUMPTION OF REFINED PETROLEUM PRODUCTS: 1961-1981

(In thousands of barrels)

Year	Asphalt	Aviation gasoline	Distillate	Jet fuel	Kerosene	LPG	Lubricants	Gasoline	Residual	Road oil	All other petroleum	Total refined petroleum products
1961	2,431	1,361	30,701	3,574	6,286	2,704	2,430	64,864	10,000	132	7,797	132,278
1962	2,672	1,616	31,272	4,155	6,985	2,984	2,462	67,332	9,231	178	7,892	136,778
1963	2,450	1,646	30,436	4,193	6,145	3,733	2,461	71,299	9,753	165	8,719	140,999
1964	2,013	1,698	29,690	4,477	6,033	3,418	2,584	73,654	8,872	80	8,832	141,352
1965	2,062	1,833	30,642	4,411	5,880	3,621	3,025	77,319	8,191	202	9,141	146,326
1966	3,075	2,057	31,663	5,161	4,604	4,316	3,142	82,423	7,802	63	9,324	153,630
1967	3,086	2,234	36,878	6,240	2,880	5,334	2,554	84,448	5,520	73	8,975	158,222
1968	3,507	2,773	36,661	7,465	2,922	5,596	2,806	90,801	5,656	86	9,206	167,479
1969	3,132	2,821	37,471	7,836	2,789	6,487	3,099	95,369	6,698	125	9,708	175,536
1970	3,741	658	38,106	7,396	3,124	6,058	3,157	96,833	10,059	139	9,476	178,748
1971	3,707	380	41,684	7,228	3,018	6,606	2,785	99,548	11,605	59	9,148	185,768
1972	4,522	501	48,451	6,936	2,645	7,818	2,982	105,198	11,388	115	9,911	200,467
1973	5,237	554	46,994	6,987	1,995	7,906	3,676	110,100	14,560	130	10,185	208,324
1974	4,793	302	44,080	6,488	1,600	7,665	3,521	107,057	14,876	78	9,701	200,161
1975	3,835	369	41,671	5,823	1,349	7,316	2,751	108,256	18,739	50	9,368	199,528
1976	3,466	396	43,789	5,853	1,551	8,585	3,056	113,506	20,656	21	11,314	212,191
1977	4,111	447	44,798	6,411	1,421	8,626	3,272	114,812	21,345	31	12,866	218,139
1978	4,330	467	45,442	6,916	1,360	8,878	3,513	117,526	24,871	45	13,075	226,425
1979	4,152	395	31,642	7,159	1,535	7,515	3,676	108,261	19,046	11	10,781	192,859
1980	3,483	448	27,643	6,646	1,233	6,736	3,274	97,025	13,289	25	10,844	170,645
1981	2,270	268	26,630	6,131	992	6,418	3,140	92,783	7,825	14	7,915	154,385

SOURCE: Michigan Department of Commerce, Energy Information Administration, Michigan Energy Data Report, 1960 through 1980, July 1982; and Michigan Energy Data, Energy Information Administration, U.S. Department of Energy (Washington, D.C.), 1983.

TABLE XIX-3. PER CAPITA ENERGY CONSUMPTION IN MICHIGAN AND UNITED STATES: 1960, 1970, AND 1980

	Consumption per capita (thousands of BTU)					
	Michigan			United States		
Item	1960	1970	1980	1960	1970	1980
Gross energy consumption:						
By fuel type						
Petroleum						
Asphalt	2	3	3	4	5	4
Aviation gasoline	1	0.4	0.3	2	1	0.3
Distilate fuel	22	25	18	22	26	27
Jet fuel	2	5	4	4	10	10
Kerosene	3	2	1	3	3	1
LPG	1	3	4	5	8	9
Lubricants	2	2	2	1	1	2
Motor gasoline	44	57	55	42	54	56
Residual fuel	9	7	8	20	25	25
All other petroleum	6	7	8	7	11	17
Total petroleum	92	111	102	111	145	151
Total Coal	86	97	80	56	62	68
Natural gas	49	94	96	69	107	90
Nuclear power	0	1	18	0.03	1	12
Hydro-electric power	5	2	8	9	13	14
TOTAL ENERGY CONSUMED	235	308	299	245	328	334

TABLE XIX-10. MICHIGAN RESIDENTIAL SECTOR RETAIL ENERGY PRICES: 1970-1983

Year	Electricity (cents/kWh)	Natural gas (dollars/Mcf)	#2 fuel oil (cents/gallon)	Gasoline (cents/gallon)	Liquified Petroleum gases (cents/gallon)
1970	2.51	1.05	17.95	33.82	11.34
1971	2.51	1.07	18.46	34.35	11.38
1972	2.57	1.08	18.62	34.23	11.49
1973	2.79	1.13	21.12	39.53	14.46
1974	3.09	1.16	33.86	57.53	21.10
1975	3.84	1.68	36.99	59.59	22.72
1976	4.10	1.92	40.56	62.45	26.74
1977	4.32	2.24	46.82	66.24	31.56
1978	4.73	2.36	50.02	68.72	31.38
1979	4.89	2.73	72.03	93.31	34.59
1980	5.52	3.18	100.10	129.37	63.00
1981	6.08	3.94	124.00	143.50	76.00^{p}
1982	6.76	4.79	113.90	n.a.	n.a.
1983	6.25	n.a.	106.40	96.00	81.2

SOURCE: Consumers Power Company, Detroit Edison Company, Michigan Public Service Commission, U.S. Department of Labor, U.S. Department of Energy, American Automobile Association as reported in Michigan Department of Commerce, Energy Information Administration, Michigan Energy Data Book, (Lansing: 1980), p. 115, and U.S. Department of Energy, special release.
n.a.: Data not available.
p: Preliminary

NOTE: Prices are based on the following assumptions: Electricity - average monthly billing for 500 kWh usage; natural gas - billing charge for 175 Mcf annual usage; #2 fuel oil - average monthly price in the Detroit area; gasoline - average leaded and unleaded prices derived from a survey of 300 major brand stations along main state travel routes; liquified petroleum gases - average regional and national prices.

TABLE XIX-11. MICHIGAN COMMERCIAL SECTOR RETAIL ENERGY PRICES: 1971-1980

Year	Electricity (cents/kWh)	Natural gas (dollars/Mcf)	Distillate (cents/gallon)	Residual (dollars/barrel)
1971	2.37	.87	15.26	4.17
1972	2.47	.90	15.33	4.37
1973	2.58	.96	16.58	5.27
1974	3.01	1.13	30.08	11.07
1975	3.59	1.48	32.52	12.72
1976	4.01	1.82	35.60	11.76
1977	4.32	2.12	42.34	14.11
1978	4.67	2.23	44.45	13.67
1979	4.93	2.58	65.87	16.86
1980	5.49	3.19	91.72	22.79

SOURCE: Michigan Department of Commerce, Energy Information Administration, State Physical Unit Price Data Base.

TABLE XIX-12. MICHIGAN INDUSTRIAL SECTOR RETAIL ENERGY PRICES: 1971-1980

Year	Electricity (cents/kWh)	Natural gas (dollars/Mcf)	Distillate (cents/gallon)	Residual (dollars/barrel)	Kerosene (cents/gallon)	LPG (cents/gallon)
1971	1.29	.56	9.67	4.08	10.23	12.89
1972	1.34	.63	9.66	4.27	10.22	13.26
1973	1.44	.69	11.00	5.15	11.64	14.00
1974	1.90	.91	28.55	10.83	30.22	22.47
1975	2.48	1.23	31.55	12.44	33.05	22.84
1976	2.70	1.53	32.00	11.63	33.59	25.78
1977	2.93	1.81	37.90	13.69	40.20	30.79
1978	3.29	1.90	40.79	13.55	43.40	28.89
1979	3.54	2.25	52.12	14.70	68.63	34.97
1980	4.20	2.89	85.21	20.53	91.53	46.63

SOURCE: Michigan Department of Commerce, Energy Information Administration, State Physical Unit Price Data Base.

TABLE XIX-13. ESTIMATED PROVED RECOVERABLE RESERVES OF WET NATURAL GAS IN MICHIGAN AND THE UNITED STATES: 31 DECEMBER 1953-1982

(Billions of cubic feet)

	Michigan wet natural gas				United States
Year	Non-associated[a]	Associated-dissolved[b]	Underground storage[c]	Total	Total
1953	34,629	46,780	194,110	275,519	211,447,132
1954	31,194	85,703	213,203	330,100	211,710,732
1955	46,764	73,013	206,097	325,874	223,697,445
1956	45,596	82,098	234,092	361,786	237,774,569
1957	84,941	80,980	278,107	444,028	246,569,255
1958	121,669	104,627	271,817	498,113	254,142,037
1959	116,255	113,889	285,259	515,403	262,596,593
1960	116,015	128,427	341,316	585,758	263,758,800
1961	138,966	158,562	369,136	666,664	267,727,671
1962	128,620	144,733	377,207	650,560	273,765,604
1963	112,403	138,924	471,485	722,812	276,151,233
1964	151,853	127,372	495,051	774,276	281,251,454
1965	108,141	127,174	510,489	745,804	286,468,923
1966	73,556	118,999	580,576	773,131	289,332,805
1967	90,774	87,711	582,427	760,912	292,907,703
1968	77,274	79,909	600,243	757,426	287,349,856
1969	73,268	82,186	595,510	750,964	275,108,835
1970	211,134	112,530	616,007	939,671	290,746,408
1971	179,479	184,541	652,462	1,016,482	278,805,618
1972	293,938	385,580	617,297	1,296,815	266,084,846
1973	492,825	431,086	624,597	1,548,508	249,950,207
1974	477,613	455,230	525,411	1,458,254	237,132,497
1975	483,268	536,766	586,715	1,606,749	228,200,176
1976	528,778	524,475	544,893	1,598,146	216,026,074
1977	614,184	587,542	589,474	1,791,200	208,877,878
1978	607,556	562,190	598,835	1,768,581	200,301,707
1979	605,819	531,784	660,320	1,797,923	194,916,624
1979[d]	601,000	733,000	n.a.	1,334,000	208,335,000
1980[d]	668,000	883,000	n.a.	1,551,000	206,259,000
1981[d]	494,000	758,000	n.a.	1,252,000	209,434,000
1982	481,000	719,000	n.a.	1,200,000	209,254,000

SOURCE: Bureau of Mines, Minerals Yearbook--Metals, Minerals, and Fuels, 1947 through 1975 (Washington, D.C.: annually), Natural Gas Section, Table 16 (1975); American Petroleum Institute, special release; and U.S. Department of Energy, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves (annual).

a. Free gas not in contact with crude oil in the reservoir.

b. Associated gas is free gas in contact with crude oil in the reservoir; dissolved gas is gas in solution with crude oil in the reservoir.

c. Gas held in underground reservoirs for storage purposes only.

d. The U.S. Department of Energy now is solely responsible for estimating reserves. Their 1979 figures differ from those of the American Petroleum Institute. There is a large sampling error (20 percent) associated with the DOE estimates for Michigan.

n.a.: not available.

TABLE XIX-14. ESTIMATED PROVED RESERVES OF NATURAL GAS LIQUIDS AND CRUDE OIL IN MICHIGAN AND THE UNITED STATES: 31 DECEMBER 1961-1982

	Natural gas liquids[a] (thousand barrels)				Crude oil (million barrels)	
	Michigan			United States total		
Year	Nonassociated with oil	Associated-dissolved[b]	Total		Michigan	United States
1961	695	3,621	4,316	7,049,096	79	31,759
1962	2,001	3,423	5,424	7,311,517	75	31,389
1963	2,048	3,278	5,326	7,673,978	69	30,970
1964	969	4,892	5,861	7,746,632	58	30,991
1965	1,565	3,351	4,916	8,023,534	53	31,352
1966	984	3,057	4,041	8,328,966	71	31,452
1967	1,461	2,083	3,544	8,614,231	63	31,377
1968	1,429	2,163	3,592	8,598,108	55	30,707
1969	1,375	2,681	4,056	8,143,174	52	29,632
1970	5,437	4,466	9,903	7,702,941	46	39,001[c]
1971	4,616	7,968	12,584	7,304,227	59	38,063[c]
1972	5,531	13,495	19,026	6,786,559	--	36,339[c]
1973	7,507	17,539	25,046	6,454,707	72	35,300[c]
1974	4,906	15,358	20,264	6,350,449	82	34,250
1975	3,984	16,649	20,633	6,267,830	93	32,682
1976	5,081	17,316	22,397	6,401,967	139	30,942
1977	11,183	34,015	45,198	5,994,365	133	29,486
1978	20,857	44,836	65,693	5,925,852	190	27,804
1979	28,245	43,281	71,526	5,655,323	176	27,051
1979[d]	n.a.	n.a.	112,000	6,615,000	159	28,810
1980[d]	n.a.	n.a.	112,000	6,728,000	205	29,805
1981[d]	n.a.	n.a.	102,000	7,068,000	240	29,426
1982[d]	n.a.	n.a.	97,000	7,221,000	184	27,858

SOURCE: Bureau of Mines, *Minerals Yearbook--Metals, Minerals, and Fuels*, 1960 through 1974 (Washington, D.C.: annually), Natural Gas Liquids section, Table 9, and Crude Petroleum and Products section, Table 13 (1975 data); American Petroleum Institute, special release; and U.S. Department of Energy, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves* (annual).

a. Natural gasoline, LP gases, and condensate.

b. Associated natural gas liquids are in contact with crude oil in the reservoir; dissolved natural gas liquids are in solution with crude oil in the reservoir.

c. Includes reserves in the Prudhoe Bay Permo-Triassic reservoir, discovered in 1968 and not included prior to 1970.

d. The U.S. Department of Energy now is solely responsible for estimating reserves. Their 1979 figures differ from those of the American Petroleum Institute. There is a large sampling error (20 percent) associated with the DOE estimates for Michigan.

n.a.: Not available.

TABLE XIX-15. CRUDE RUNS TO STILLS, REFINERY RECEIPTS OF CRUDE OIL, AND PRODUCTION OF GASOLINE IN MICHIGAN: 1957-1982

(Thousands of barrels)

Year	Crude runs to stills	Refinery receipts			Gasoline production
		Michigan crude	Other U.S. crude	Canadian crude	
1957	49,414	11,227	37,499	1,535	19,525
1958	44,924	9,412	34,926	1,351	18,294
1959	50,408	10,180	38,611	1,888	19,908
1960	49,768	15,610	31,764	2,542	20,988
1961	47,973	18,453	23,815	5,622	20,513
1962	49,152	17,320	24,342	7,437	21,431
1963	51,380	18,304	26,857	6,227	23,710
1964	51,659	17,423	29,282	4,971	24,989
1965	52,192	14,759	32,184	5,229	25,486
1966	52,949	14,139	32,189	6,686	27,782
1967	50,150	12,800	29,204	8,411	25,664
1968	53,525	12,649	26,249	14,461	26,478
1969	51,877	11,640	27,833	12,547	26,560
1970	53,396	11,159	24,504	17,799	26,804
1971	56,395	10,847	27,381	17,932	27,399
1972	58,447	12,306	28,446	17,780	27,047
1973	44,853	11,624	13,974	19,409	20,509
1974	43,255	12,231	14,951	15,943	19,543
1975	41,318	17,032	15,336	9,248[a]	19,404
1976	45,417	22,123	12,204	11,032	21,230
1977	47,161	25,556	14,247	7,445	21,453
1978	48,670	28,441	12,310	7,736	19,899
1979	47,656	27,520	12,366	7,808	n.a.
1980	36,520	23,771	8,404	4,446	n.a.
1981	32,664	n.a.	n.a.	n.a.	n.a.
1982	31,462	n.a.	n.a.	n.a.	n.a.

SOURCE: Bureau of Mines, Minerals Yearbook--Metals, Minerals, and Fuels, 1947 through 1975 (Washington, D.C.: annually), Crude Petroleum and Products Section, Tables 16 and 34 (1975 data); Bureau of Mines, special release (1976 and 1980 data); and Michigan Department of Natural Resources, special release.

a. Includes 418,000 barrels of non-Canadian foreign crude.
n.a.: Not available.

TABLE XIX-16. PRODUCING OIL WELLS, AVERAGE PRODUCTION, AND VALUE OF CRUDE PETROLEUM AT WELLS IN MICHIGAN: 1952-1982

Year	Approximate number of oil wells producing 31 December	Average production per well per day[a] (barrels)	Total value at wells (thousands of dollars)	Average value per barrel (dollars)
1952	3,980	9.3	35,250	2.66
1953	4,000	8.4	35,870	2.92
1954	4,173	8.1	35,600	2.96
1955	4,034	7.5	32,900	2.92
1956	4,191	7.1	30,824	2.87
1957	3,995	6.8	31,117	3.06
1958	3,895	6.4	27,366	2.94
1959	4,130	7.1	30,688	2.94
1960	4,348	10.3	46,266	2.91
1961	4,301	12.0	55,182	2.92
1962	4,282	10.9	48,775	2.85
1963	4,234	10.3	45,523	2.85
1964	4,151	10.2	43,839	2.81
1965	4,036	9.9	41,091	2.79
1966	4,141	9.6	40,913	2.87
1967	4,004	9.2	39,455	2.89
1968	4,273	8.6	38,287	2.95
1969	3,878	8.2	37,494	3.07
1970	4,311	7.8	36,246	3.10
1971	4,046	7.8	38,859	3.27
1972	3,685	9.2	41,556	3.20
1973	3,733	10.8	59,413	4.07
1974	4,201	12.4	154,746	8.59
1975	3,655	17.0	262,352	10.74
1976	3,770	22.4	329,637	10.84
1977	3,903	23.5	362,722	11.00
1978	3,890	24.4	427,881	12.34
1979	3,890	24.6	520,832	14.94
1980	4,900	21.0	728,562	21.55
1981	5,244	20.0	992,434	30.38
1982	5,403	20.0	1,023,472	32.53

SOURCE: Bureau of Mines, Minerals Yearbook--Metals, Minerals, and Fuels, 1952 through 1975 (Washington, D.C.: annually), Crude Petroleum and Products section, Tables 10 and 55 (1975 data); Bureau of Mines, special release (1976 and 1980 data); and Michigan Department of Natural Resources, special release.

[a] Based on average number of wells during the year.

TABLE XIX-17. PRODUCTION AND DISPOSITION OF NATURAL GAS IN MICHIGAN AND INTERSTATE NATURAL GAS MOVEMENTS TO AND FROM MICHIGAN: 1963-1982

(Millions of cubic feet)

Year	Production		Disposition			Average wellhead value (cents per mcf)	Interstate movements	
	From gas wells	From oil wells	Used for repressuring	Vented and flared	Marketed production		Deliveries to Canada	Receipts from other states
1963	25,200	10,400	1,640	1,110	32,850	27.1	0	471,030
1964	21,100	12,600	1,608	704	31,388	25.4	0	493,665
1965	24,700	12,200	1,900	442	34,558	25.1	0	547,370
1966	26,868	16,121	8,353	516	34,120	25.2	20,174	653,316
1967	22,709	20,383	7,642	1,861	33,589	24.7	40,418	698,475
1968	24,151	19,779	2,330	1,120	40,480	25.1	68,045	742,934
1969	22,285	16,405	1,719	808	36,163	25.7	29,770	776,010
1970	23,774	16,264	378	809	38,851	26.7	10,643	791,773
1971	10,968	15,482	788	0	25,662	26.4	14,236	839,385
1972	13,523	21,730	0	1,032	34,221	30.7	15,426	823,515
1973	23,272	22,424	0	1,117	44,579	39.2	14,736	925,952
1974	45,745	24,719	63	1,268	69,133	50.4	13,232	869,059
1975	71,907	31,994	176	1,612	102,113	63.4	10,153	826,505
1976	81,628	40,003	327	2,042	119,262	89.5	7,461	742,482
1977	86,037	47,189	981	2,291	129,954	101.0	0	664,617
1978	97,866	54,318	1,401	2,736	148,047	119.7	0	664,144
1979	102,048	62,812	2,169	2,960	159,731	174.0	393	805,953
1980	89,651	74,459	2,375	3,433	158,302	235.5	257,647	862,303
1981	158,293[a]		2,390	3,310	152,593	286.0	283,347	728,736
1982	150,188[a]		2,400	3,320	144,468	319.0	251,634	829,747

SOURCE: Bureau of Mines, Minerals Yearbook--Metals, Minerals, and Fuels, 1963 through 1975 (Washington, D.C.: annually), Natural Gas Section, Table 16 (1975); and Bureau of Mines, special release (1976, 1977 and 1978 data); U.S. Department of Energy, Natural Gas Production and Consumption 1979, (Washington, D.C.: annually) January 1981; U.S. Department of Energy, Natural Gas Annual, 1980, and Michigan Department of Natural Resources, special release.

a. Total production from oil and gas wells.

TABLE XIX-18. OIL AND NATURAL GAS PRODUCTION IN MICHIGAN, BY COUNTY: 1981

County	Oil (barrels)	Natural gas (000 cubic feet)	County	Oil (barrels)	Natural gas (000 cubic feet)
Allegan	109,728	16,284	Manistee	7,427,645	41,981,643
Antrim	134,650	436,465	Mason	210,936	1,583,362
Arenac	171,774	0	Mecosta	21,609	4,963
Barry	12,378	0	Midland	180,901	0
Bay	208,381	0	Missaukee	906,299	1,118,173
Benzie	190,450	177,608	Monroe	3,193	0
Calhoun	983,565	1,785,700	Montcalm	70,808	0
Cass	25,343	0	Muskegon	9,224	0
Cheboygan	287	0	Newaygo	17,094	1,675
Clare	413,697	683,113	Oakland	94,221	1,649,072
Crawford	1,443,049	2,878,838	Oceana	19,046	0
Eaton	612,847	4,619,743	Ogemaw	579,850	106,405
Genesee	20,454	0	Osceola	132,028	3,265
Gladwin	312,177	0	Oscoda	742	0
Grand Traverse	3,867,586	32,044,200	Otsego	6,450,883	11,795,598
Gratiot	20,454	0	Ottawa	8,167	86,436
Hillsdale	312,177	5,678,680	Presque Isle	9,772	0
Huron	1,497	0	Roscommon	411,693	557,800
Ingham	895,569	2,421,400	Saginaw	46,938	0
Isabella	181,419	0	Shiawassee	12,281	0
Jackson	4,918	0	St. Clair	430,953	1,201,151
Kalamazoo	1,136	0	Tuscola	74,001	0
Kalkaska	3,590,124	30,995,309	Van Buren	32,897	0
Kent	93,622	0	Washtenaw	344	34
Lake	78,413	0	Wayne	11,243	0
Lapeer	353,632	203,634	Wexford	597,325	2,960,784
Lenawee	379	0			
Livingston	804	525,776			
Macomb	25,981	4,280,938	TOTAL	32,609,164	149,803,049

SOURCE: Michigan Department of Natural Resources, Michigan's Oil and Gas Fields, 1981, Annual Statistical Summary 36 (Lansing: 1983), p. 5.

TABLE XIX-19. OIL PRODUCTION IN MICHIGAN, BY GEOLOGIC SYSTEM AND FORMATION: 1979, 1980, 1981 AND CUMULATIVE THROUGH 1981

	First year of production	Production (in barrels) 1979	1980	1981	Cumulative thru 1981
Mississippian					
Marshall	1938	958	925	1,068	86,197
Berea	1925	22,411	55,596	110,178	2,695,322
Devonian					
Traverse	1927	424,597	457,813	460,657	107,583,562
Dundee-Reed City	1927	1,604,906	1,506,950	1,273,415	344,009,648
Detroit River	1939	2,740,009	2,827,265	2,942,586	76,637,296
Silurian					
Salina-Niagaran	1952	28,524,674	27,697,663	26,596,115	215,753,429
Ordovician					
Trenton-Black River	1935	1,429,117	1,262,251	1,128,100	123,347,572
Total barrels, all formations		34,746,672	33,808,463	32,512,119	879,113,206

SOURCE: Michigan Department of Natural Resources, *Michigan's Oil and Gas Fields, 1979, 1980, and 1981*, Annual Statistical Summary 34 (Lansing: annually).

TABLE XIX-20. GAS PRODUCTION IN MICHIGAN, BY GEOLOGIC SYSTEM AND FORMATION: 1979, 1980, 1981, AND CUMULATIVE THROUGH 1981

	First year of production	Production (In thousands of cubic feet) 1979	1980	1981	Cumulative thru 1981[a]
Mississippian					
Stray-Marshall	1931	33,952	21,313	8,228	213,686,363
Berea	1936	8,093	28,849	34,802	11,054,323
Devonian					
Antrim Shale	1947	139,212	375,883	355,809	2,697,350
Traverse	1934	64,429	620,738	644,611	10,313,638
Dundee-Reed City	1929	114,563	15,118	1,675	41,533,999
Detroit River	1946	1,725,677	1,885,846	2,051,953	78,938,145
Silurian					
Salina-Niagaran	1929	150,971,034	149,445,361	140,823,661	1,264,853,076
Ordovician					
Trenton-Black River	1954	6,673,294	5,944,814	5,678,680	219,068,112
Total Mcf, All formations		157,730,254	158,337,922	149,599,419	1,842,153,026

SOURCE: Michigan Department of Natural Resource, *Michigan's Oil and Gas Fields, 1979, 1980, and 1981*, Annual Statistical Summary 34 (Lansing: annually).

TABLE XIX-21. CAPACITY OF OPERABLE PETROLEUM REFINERIES IN MICHIGAN AS OF JANUARY 1, 1984

	Crystal Refining Co., Carson City	Lakeside Refining Co., Kalamazoo	Marathon Oil Co., Detroit	Total Petroleum Inc., Alma	Total
Barrels per stream day , except were noted.					
Crude capacity:					
Operating barrels per calendar day	3,000	5,600	68,500	40,000	117,100
Operating barrels per stream day	6,000	5,600	71,000	42,000	124,600
Charge capacity:					
Vacuum distillation			26,000		26,000
Catalytic cracking (fresh)			27,000	18,000	45,000
Catalytic cracking (recycle)			1,300		1,300
Catalytic reforming		2,000[e]	17,000[a]	14,000[a]	33,000
Catalytic hydrotreating			17,500[c]	1,400[b] 3,800[d]	22,700
Production capacity					
Alkylation			4,000	3,500	7,500
Asphalt			8,650		8,650

SOURCE: Energy Information Administration, U.S. Department of Energy, Petroleum Supply Annual 1983, (Washington, D.C.: June 1984), Vol. 1, Table 3, p. 89.

a. Bi-Metallic
b. Distillate
c. Reformer feeds
d. Residual
d. Conventional

TABLE XIX-22. MICHIGAN NATURAL GAS - STORAGE HISTORY, 1941-1983

As of year end	Storage fields activated	County	Incremental capacity (Bcf)	Total cyclic capacity (Bcf)
1941	Austin (MW)	Mecosta	13	13
1947	Reed City (MW)	Osceola & Lake	18	31
1947	Cranberry Lake (MGS)	Clare & Missaukee	13	44
1947	Winterfield (MGS)	Clare & Osceola	33.2	77.2
1948	Goodwell (MW)	Newaygo	19	96.2
1950	Lincoln-Freeman (MW)	Clare	21	117.2
1950	Winfield (MW)	Montcalm	12	129.2
1951	Orient (MW)	Clare & Osceola	6	135.2
1951	Norwich (MW)	Newaygo	5	140.2
1953	Taggert (MC)	Mecosta & Montcalm	54	194.2
1956	Coldwater (MW)	Isabella	8	202.2
1957	Croton (MW)	Newaygo	4	206.2
1958	New Haven (MC)	Gratiot & Montcalm	12	218.2
1960	North Hamilton (MW)	Clare	8	226.2
1960	Overisel (CP)	Allegan	24	250.2
1961	Ira (CP)	St. Clair	4	254.2
1961	Marysville (SM)	St. Clair	0.4	254.6
1962	Riverside (CP)	Missaukee	2.3	256.9
1962	Howell (P.E.)	Livingston	20	276.9
1963	Loreed (MW)	Osceola & Lake	45	321.9
1963	Salem (CP)	Allegan	10	331.9
1965	Belle River (MC)	St. Clair	44	375.9
1965	Lennox (CP)	Macomb	1.5	377.4
1966	Ray (CP)	Macomb	46	423.4
1968	Northville (CP)	Wayne & Washtenaw	11.8	435.2
1971	Partello (MGU)	Calhoun	2.0	437.2
1971	Puttygut (CP)	St. Clair	11	448.2
1972	Four Corners (CP)	St. Clair		
1972	Swan Creeks (CP)	St. Clair	2.8	451.0
1972	Columbus (MC)	St. Clair	18	469.0
1973	West Columbus (MC)	St. Clair	20	489.0
1974	Marysville (SM)	St. Clair	3.5	492.5
1975	Muttonsville (MW)	Macomb	14	506.5
1975	Anderson (MGU)	Calhoun	1	507.5
1975	Campbell (MGU)	Calhoun	1	508.5
1975	Calhoun County (BC)	Calhoun	0.2	525.6
1976	Hessen (CP)	St. Clair	13.6	522.1
1977	Marsac Creek (CP)	St. Clair	3.3	525.4
1978	Capac (MW)	St. Clair	30.0	555.6
1980	Cold Springs 12 (ANR)	Kalkaska	25.0	580.6

TABLE XIX-22. MICHIGAN NATURAL GAS - STORAGE HISTORY, 1941-1983 (cont.)

As of year end	Storage fields activated	County	Incremental capacity (Bcf)	Total cyclic capacity (Bcf)
1980	Rapid River 35 (ANR)	Kalkaska	15.0	595.6
1980	Chester 15 (MW)	Otsego	16.8	612.4
1981	Charlton 1 (MW)	Otsego	16.3	628.7
1981	Cold Springs 31 (ANR)	Kalkaska	4.9	633.6
1981	East Kalkaska 1 (ANR)	Kalkaska	1.0	634.6
1981	Excelsior 6 (ANR)	Kalkaska	4.9	639.5
1981	Collin Field (SM)	St. Clair	2.0	641.5

SOURCE: Michigan Public Service Commission as reported in Michigan Department of Commerce, Energy Administration, Michigan Energy Data Book (Lansing: 1983), pp. 44 and 45.

Key: MW = Michigan Wisconsin Pipeline Company
MC = Michigan Consolidated Gas Company
MGS = Michigan Gas Storage Company
MGU = Michigan Gas Utilities Company
CP = Consumers Power Company
SM = Southeastern Michigan Gas Company
P.E.= Panhandle Eastern Pipeline Company
BC = Battle Creek Gas Company
ANR = ANR Storage Company

TABLE XIX-23. DISTRIBUTION OF BITUMINOUS COAL AND LIGNITE FOR CONSUMPTION IN MICHIGAN, BY TYPE OF CUSTOMER: 1946 AND 1959-1983

(Thousand short tons)

Year	Electric utilities	Coke and gas plants	Retail dealers	All others	Total
1946	--	3,040[a]	8,460	13,709[b]	25,209
1959	10,675	4,489	2,892	9,175	27,231
1960	10,191	4,517	2,458	7,910	25,076
1961	9,997	4,121	2,514	7,695	24,327
1962	12,276	4,249	2,358	8,372	27,255
1963	13,582	4,813	2,154	9,339	29,888
1964	14,690	5,309	1,771	9,166	30,936
1965	16,966	5,338	2,032	9,075	33,411
1966	18,464	5,012	1,831	9,463	34,770
1967	19,605	4,591	1,485	9,278	34,959
1968	20,832	4,914	1,474	9,567	36,787
1969	21,432	4,823	1,166	8,253	35,674
1970	23,244	4,942	1,008	7,439	36,633
1971	19,416	4,861	817	7,531	32,625
1972	21,424	5,378	649	7,634	35,085
1973	20,294	4,876	561	5,954	31,685
1974	20,623	3,835	351	4,441	29,250
1975	21,802	5,343	262	3,883	31,290
1976	21,197	4,493	248	3,867	29,805
1977[c]	21,165	4,029	160	3,447	28,801
1978[c]	21,192	2,928	73	3,415	27,608
1979[c]	24,047	4,026	35	4,276	32,385
1980	23,003	3,339[d]	308[e]	4,554	31,206
1981	23,122	3,225[d]	182[e]	3,624	30,153
1982	20,961	2,820[d]	233[e]	3,529	27,544
1983	20,960	2,222[d]	165[e]	3,899	27,246

SOURCE: Bureau of Mines, *Minerals Yearbook--Metals, Minerals, and Fuels*, 1947 through 1975 (Washington, D.C.: annually), Crude Petroleum and Products section, Tables 16 and 24 (1975 data); Bureau of Mines, special (1976-1979 data); thereafter, U.S. Department of Energy, *Coal Distribution*, (Washington, D.C.: annually).

a. By product and water gas plants.
b. Industrial; includes electric utilities.
c. Prior to the fourth quarter of 1977, data collection was on a voluntary basis, with some estimating by the Bureau of Mines. Reporting now is mandatory. Since the third quarter of 1977, only actual company figures are tallied to develop state and national totals. The data for 1977 and 1978 are not strictly comparable with each other, therefore, nor with previous years' figures.
d. Coke plants only.
e. Residential and commercial.

TABLE XIX-24. TYPICAL ELECTRIC RATES FOR RESIDENTIAL SERVICES IN MICHIGAN CITIES OF 10,000 OR MORE INHABITANTS: 1 JANUARY 1983

Community	250 kwh	500 kwh	750 kwh	1000 kwh	2500 kwh	Utility
Adrain	$14.26	$28.53	$41.27	$56.85	$139.04	Consumers Power
Albion	14.26	28.53	41.27	56.85	139.04	Consumers Power
Allen Park	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Alpena	16.91	29.86	42.82	55.77	133.50	Alpena Power Co.
Ann Arbor	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Battle Creek	14.26	28.53	41.27	56.85	139.04	Consumers Power
Bay City	14.26	28.53	41.27	56.85	139.04	Consumers Power
Bay City[a]	13.69	24.55	34.59	46.50	109.56	Bay City City of
Benton Harbor	13.73	23.70	33.68	44.05	114.31	Indiana & MI Electric Co.
Berkley	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Beverly Hills	16.26	32.52	44.49	[illegible].17	154.76	Detroit Edison
Big Rapids	14.26	28.53	41.27	56.85	139.04	Consumers Power
Birmingham	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Cadillac	14.26	28.53	41.27	56.85	139.04	Consumers Power
Clawson	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Dearborn	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Dearborn Hgts	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Detroit	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Drayton Plains	16.26	32.52	44.49	66.17	154.76	Detroit Edison
East Detroit	16.26	32.52	44.49	66.17	154.76	Detroit Edison
E. Gr. Rapids	14.26	28.53	41.27	56.85	139.04	Consumers Power
E. Lansing[a]	14.85	27.20	40.29	53.39	134.18	Lansing City of
E. Lansing[a]	14.85	27.20	40.29	53.39	136.48	Lansing City of
Ecorse	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Escanaba[a]	21.80	40.05	56.80	73.55	174.05	Escanaba City of
Farmington	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Farmington Hls	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Ferndale	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Flint	14.26	28.53	41.27	56.85	139.04	Consumers Power
Fraser	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Garden City	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Grand Haven[a]	17.13	31.60	47.20	62.80	165.40	Gr.Haven City of
Grand Rapids	14.26	28.53	41.27	56.85	139.04	Consumers Power
Grandville	14.26	28.53	41.27	56.85	139.04	Consumers Power
Grosse Pte Frms	16.26	32.52	44.49	66.17	154.76	Detroit Edison

TABLE XIX-24. TYPICAL ELECTRIC RATES FOR RESIDENTIAL SERVICES IN MICHIGAN CITIES OF 10,000 OR MORE INHABITANTS: 1 JANUARY 1983 (cont.)

Community	250 kwh	500 kwh	750 kwh	1000 kwh	2500 kwh	Utility
Grosse Pte PK	$16.26	$32.52	$44.49	$66.17	$154.76	Detroit Edison
Grosse Pte Wds	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Hamtramck	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Harper Woods	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Hazel Park	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Highland Park	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Holland	14.26	28.53	41.27	56.85	139.04	Consumers Power
Holland[a]	15.50	28.50	37.65	50.65	128.65	Holland City of
Holt	14.26	28.53	41.27	56.85	139.04	Consumers Power
Inkster	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Jackson	14.26	28.53	41.27	56.85	139.04	Consumers Power
Jenison	14.26	28.53	41.27	56.85	139.04	Consumers Power
Kalamazoo	14.26	28.53	41.27	56.85	139.04	Consumers Power
Kentwood	14.26	28.53	41.27	56.85	139.04	Consumers Power
Lakeview	14.26	28.53	41.27	56.85	139.04	Consumers Power
Lansing[a]	14.85	27.20	40.29	53.39	134.18	Lansing City of
Lansing[a]	14.85	27.20	40.29	53.39	136.48	Lansing City of
Lincoln Park	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Livonia	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Madison Hgts	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Marquette	21.86	39.10	56.36	73.60	155.05	Marquette City of
Melvindale	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Menominee	14.53	25.86	33.27	44.30	102.00	Wisconsin Pub Serv
Menominee	14.53	25.86	33.27	44.60	110.40	Wisconsin Pub Serv
Midland	14.26	28.53	41.27	56.85	139.04	Consumers Power
Monroe	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Mount Clemens	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Mount Pleasant	14.26	28.53	41.27	56.85	139.04	Consumers Power
Muskegon	14.26	28.53	41.27	56.85	139.04	Consumers Power
Muskegon Hgts	14.26	28.53	41.27	56.85	139.04	Consumers Power
Niles[a]	13.05	21.26	28.49	35.70	74.23	Niles City of
Norton Shores	14.26	28.53	41.27	56.85	139.04	Consumers Power
Novi	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Oak Park	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Owosso	14.26	28.53	41.27	56.85	139.04	Consumers Power

TABLE XIX-24. TYPICAL ELECTRIC RATES FOR RESIDENTIAL SERVICES IN MICHIGAN CITIES OF 10,000 OR MORE INHABITANTS: 1 JANUARY 1983 (cont.)

Community	250 kwh	500 kwh	750 kwh	1000 kwh	2500 kwh	Utility
Pontiac	$16.26	$32.52	$44.07	$65.74	$154.49	Consumers Power
Port Huron	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Portage	14.26	28.53	41.27	56.85	139.04	Consumers Power
Redford Twp	16.26	32.52	44.49	66.17	154.76	Detroit Edison
River Rouge	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Riverview	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Romulus	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Rosville	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Royal Oak	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Saginaw	14.26	28.53	41.27	56.85	139.04	Consumers Power
Sault Ste Marie	13.59	23.79	33.98	44.18	105.35	Edison Sault Elec
Southfield	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Southgate	16.26	32.52	44.49	66.17	154.76	Detroit Edison
St. Clair Shrs	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Sterling Hgts	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Taylor	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Traverse City	14.26	28.53	41.27	56.85	139.04	Consumers Power
Traverse City[a]	17.71	33.42	49.12	65.11	159.08	Trav City City of
Trenton	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Troy	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Walker	14.26	28.53	41.27	56.85	139.04	Consumers Power
Warren	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Wayne	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Westland	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Woodhaven	16.26	32.52	44.49	66.17	154.76	Detroit Edison
Wyandotte[a]	18.58	35.80	53.03	70.25	173.60	Wyandotte City of
Wyoming	14.26	28.53	41.27	56.85	139.04	Consumers Power
Ypsilanti	16.26	32.52	44.49	66.17	154.76	Detroit Edison

SOURCE: U.S. Department of Energy, Energy Data Report, Typical Electric Bills-1983 (Washington, D.C.: 1983), Table 11.

a. Community served by publicly-owned utility.

TABLE XIX-25. INSTALLED ELECTRIC GENERATING CAPACITY OF ELECTRIC UTILITIES AND INDUSTRIAL PLANTS IN MICHIGAN, BY TYPE OF PRIME MOVER: 31 DECEMBER 1967-1982

(In thousands of kilowatts)

	Electric utilities		Industrial	Nuclear	
Year	Fossil steam	Hydro	plants	power*	Total
1967	8,930	356	1,057	n.a.	10,343
1968	9,766	356	1,050	n.a.	11,173
1969	10,480	351	1,032	n.a.	11,862
1970	10,830	348	994	n.a.	12,171
1971	11,842	345	1,014	n.a.	13,201
1972	12,562	344	1,007	n.a.	13,913
1973	13,969	1,993[a]	1,023	n.a.	16,985
1974	16,605	2,322[a]	1,019	n.a.	19,946
1975	16,629	2,321[a]	1,009	n.a.	19,959
1976	13,281	2,321[a]	1,394	2,039	19,035
1977	13,867	2,322[a]	1,399	2,039	19,626
1978	14,104	2,322[a]	1,410	3,172	21,007
1979	14,994	2,322[a]	1,428	3,172	21,916
1980	15,764	2,322[a]	1,435	3,172	22,692
1981	15,700	2,322	1,452	3,172	22,647
1982	15,557	2,322	1,490	3,172	22,541

SOURCE: Bureau of the Census, Statistical Abstract of the United States, 1967 through 1975 (Washington, D.C.: annually); thereafter U.S. Department of Energy, Electrical Power Annual (Washington, D.C.: annually).

[a] Includes the pump storage facility at Ludington where water is pumped up into a reservoir at night and released to generate electricity to meet peak loan requirements during the day.

* Data not available prior to 1976.

TABLE XIX-26. GENERATION OF ELECTRIC ENERGY BY ELECTRIC UTILITIES BY HYDRO AND OTHER PLANTS IN MICHIGAN: 1948-1982

(Thousands of kilowatt-hours)

Year	Hydro	Total fuel[a]	Total
1948	1,317,595	11,439,182	12,756,777
1949	1,369,281	11,828,945	13,198,226
1950	1,657,676	13,657,865	15,315,541
1951	1,887,163	14,748,717	16,635,880
1952	1,742,813	15,514,789	17,257,602
1953	1,703,471	18,030,717	19,734,188
1954	1,794,827	17,741,426	19,536,253
1955	1,570,501	20,794,422	22,364,923
1956	1,657,054	21,977,346	23,634,400
1957	1,552,989	23,279,559	24,832,548
1958	1,476,445	22,566,773	24,043,218
1959	1,727,293	24,829,808	26,557,101
1960	1,817,341	25,855,001	27,672,342
1961	1,635,689	26,676,370	28,312,059
1962	1,574,044	30,500,999	32,075,043
1963	1,246,431	33,705,179	34,951,610
1964	1,415,103	36,580,829	37,995,932
1965	1,667,243	40,109,476	41,776,719
1966	1,670,859	43,761,330	45,432,189
1967	1,799,231	45,833,170	47,632,901
1968	1,739,363	50,362,597	52,101,960
1969	1,732,982	53,551,867	55,284,849
1970	1,580,343	54,700,398	56,280,741
1971	1,620,622	57,459,327	59,079,949
1972	1,643.545	59,454,562	61,098,107
1973	889,714	61,826,056	62,715,770
1974	1,050,699	60,401,284	61,451,983
1975	989,369	67,168,344	68,157,713
1976	926,133	68,326,851	69,252,984
1977	804,363	67,953,514	68,757,517
1978	949,912	73,584,427	74,534,339
1979	1,184,940	77,044,618	78,229,558
1980	1,083,328	73,766,222	74,849,550
1981	1,123,665	74,471,334	75,594,999
1982	1,094,005	67,609,121	68,703,126

SOURCE: Federal Power Commission, special release; and U.S. Department of Energy, Electric Power Annual, (Washington, D.C.: annual).

a. Steam and turbine.

TABLE XIX-27. GENERATION OF ELECTRIC ENERGY BY ELECTRIC UTILITIES BY STEAM IN MICHIGAN, BY KIND OF FUEL: 1962-1982

(Thousands of kilowatt-hours)

Year	Coal	Oil[a]	Natural gas	Nuclear
1962	30,019,132	241,356	240,482	29
1963	33,171,041	224,283	187,504	122,351
1964	35,980,122	186,144	222,085	192,478
1965	39,472,433	194,419	262,017	180,607
1966	42,880,297	305,813	232,561	342,659
1967	44,495,793	460,034	375,330	502,013
1968	48,938,596	480,930	517,470	425,601
1969	51,346,646	603,897	1,200,274	401,050
1970	46,578,776	2,553,271	5,193,659	374,692
1971	47,187,538	4,277,233	5,607,036	387,520
1972	47,953,045	4,716,918	4,659,418	2,125,181
1973	48,752,756	6,326,295	3,767,128	2,979,877
1974	48,393,892	7,433,244	4,158,308	415,840
1975	48,180,133	8,336,771	3,475,317	7,176,123
1976	46,813,611	7,752,445	1,660,529	9,900,551
1977	47,624,077	7,635,801	715,910	10,231,444
1978	47,613,638	10,363,304	714,744	13,104,159
1979	51,363,534	8,110,368	1,203,678	15,139,195
1980	50,450,279	5,438,411	954,712	15,890,986
1981	53,182,672	3,028,311	648,083	17,066,081
1982	50,488,101	1,257,419	449,577	15,002,636

SOURCE: Federal Power Commission, special release; and U.S. Department of Energy, Electric Power Annual (Washington, D.C.: annual).

a. Includes distillate and residual and crude burned as residual, until 1975.

TABLE XIX-28. FOSSIL FUELS CONSUMED IN THE GENERATION OF ELECTRIC ENERGY BY ELECTRIC UTILITIES IN MICHIGAN, BY KIND OF FUEL: 1953-1982

Year	Coal[a]	Oil[b]	Gas[c]
1953	8,418,570	496,156	366,404
1954	7,946,133	459,799	425,562
1955	9,251,115	537,571	332,415
1956	9,631,375	567,966	413,409
1957	10,035,173	556,013	591,108
1958	9,231,328	528,549	1,073,800
1959	10,112,980	475,034	1,642,129
1960	10,299,737	439,867	5,208,898
1961	10,282,542	459,840	8,178,632
1962	12,003,368	451,740	2,601,428
1963	13,267,743	423,334	2,032,471
1964	14,441,995	369,453	2,384,103
1965	16,122,593	383,828	2,988,767
1966	18,148,464	733,126	2,494,984
1967	19,014,993	1,136,946	4,718,078
1968	20,820,484	1,175,483	6,842,091
1969	21,952,162	1,436,248	15,495,248
1970	20,123,939	5,479,030	64,406,787
1971	20,507,741	8,746,639	69,808,590
1972	20,420,769	9,641,758	58,899,385
1973	20,507,873	12,040,590	48,016,628
1974	20,755,361	13,713,367	56,172,035
1975	20,913,429	15,674,055	56,710,314
1976	20,369,131	15,889,145	53,510,229
1977	21,027,858	15,758,064	32,151,432
1978	21,494,695	20,423,409	36,383,647
1979	23,133,536	15,609,570	37,859,808
1980	22,150,263	10,400,333	26,368,103
1981	23,407,388	6,031,144	19,230,256
1982	21,805,840	2,437,485	7,978,506

SOURCE: Federal Power Commission, special release; and U.S. Department of Energy, *Electric Power Annual*, (Washington, D.C.: annual).

a. Short tons.
b. Barrels of 42 gallons. Includes distillate and residual and crude burned as residual.
c. Thousands of cubic feet.

TABLE XIX-30. SALES OF ELECTRIC ENERGY TO INDUSTRIAL CONSUMERS IN MICHIGAN AND THE UNITED STATES, BY MONTH: 1974-1983

(Millions of killowatt-hours)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1974	2,364	2,418	2,349	2,467	2,499	2,632	2,553	2,669	2,709	2,744	2,631	2,227
1975	2,184	2,272	2,208	2,196	2,305	2,379	2,395	2,570	2,622	2,637	2,560	2,472
1976	2,498	2,641	2,750	2,784	2,748	2,881	2,847	2,827	2,863	2,768	2,827	2,745
1977	2,622	2,760	2,846	2,814	2,956	3,002	2,869	3,020	3,002	2,761	2,930	2,761
1978	2,756	2,754	2,773	2,966	2,970	3,063	2,971	3,094	3,118	3,190	3,055	2,899
1979	3,031	2,995	3,162	2,903	3,073	3,115	2,987	2,900	2,880	2,868	2,712	2,516
1980	2,544	2,693	2,713	2,605	2,277	2,242	2,414	2,520	2,598	2,762	2,645	2,643
1981	2,355	2,621	2,704	2,644	2,648	2,800	2,729	2,721	2,576	2,493	2,444	2,131
1982	2,104	2,170	2,445	2,348	2,415	2,468	2,490	2,446	2,333	2,251	2,099	2,031
1983	2,029	2,344	2,500	2,384	2,485	2,605	2,624	2,611	2,688	2,648	2,700	2,487
						United States						
1974	55,754	54,978	55,999	56,497	57,386	58,077	57,899	59,803	60,366	60,053	57,361	53,878
1975	54,280	54,328	54,437	52,526	54,767	55,841	55,525	57,868	58,619	58,815	58,223	57,433
1976	57,463	58,228	60,516	59,967	61,271	62,920	62,657	64,184	64,653	64,208	63,106	62,842
1977	61,481	60,439	63,294	63,278	65,418	66,064	64,622	66,300	66,362	66,295	64,833	63,906
1978	64,300	60,817	61,524	63,129	66,746	69,098	67,397	69,402	70,067	71,259	69,702	67,767
1979	67,956	66,847	68,770	68,777	70,421	70,968	69,938	71,058	70,075	71,444	69,787	67,283
1980	67,532	68,508	69,058	67,908	67,325	66,739	65,531	67,377	69,570	69,413	67,613	68,517
1981	67,076	67,411	68,590	68,138	68,714	71,641	71,712	72,010	71,011	69,154	66,139	64,130
1982	62,939	62,778	64,496	62,723	62,480	63,684	62,617	63,306	59,980	60,830	60,651	58,464
1983	57,938	59,032	60,261	60,548	62,729	66,152	66,424	69,611	69,618	68,924	67,544	67,217

SOURCE: Energy Information Administration, U.S. Department of Energy, Energy Data Report (Washington, D.C.: monthly). After October 1981, Electric Power Monthly (Washington, D.C.: monthly).

TABLE XIX-29. ENERGY CONSUMPTION BY END-USE SECTOR, MEASURED IN TRILLION OF BRITISH THERMAL UNITS, IN MICHIGAN FOR SELECTED YEARS: 1960 - 1981

	1960	1965	1970	1975	1979	1980	1981
By end-use sector without and with electricity distributed							
Residential - without	346.1	409.2	489.1	479.9	458.2	466.0	430.7
- with	450.2	539.9	689.1	723.1	714.2	726.5	678.5
Commercial - without	119.2	151.7	185.5	225.6	210.0	226.3	203.7
- with	194.1	255.5	336.4	394.9	402.9	421.8	396.3
Industrial - without	675.8	807.8	822.5	747.1	670.9	626.7	559.2
- with	824.7	1,031.5	1,116.8	1,083.3	1,079.8	985.5	914.4
Transportation - without	387.6	462.5	593.0	660.5	690.1	619.7	598.9
- with	388.9	464.1	594.3	661.2	690.9	620.5	599.9
Electric utilities							
Energy input at electric utilities	297.3	420.5	603.8	743.5	865.9	868.0	850.6
Net interstate sales of electricity	31.9	39.3	42.7	5.9	1.6	-52.3	-54.0
Electricity available for distribution to four major sectors:							
Electricity sales	94.2	135.7	188.7	219.6	252.2	237.8	236.1
Associated losses	235.0	324.1	457.8	529.9	606.3	578.0	560.4
Total energy consumed	1,857.9	2,291.1	2,736.6	2,862.5	2,887.8	2,754.3	2,589.0

SOURCE: Energy Information Administration, U.S. Department of Energy, Michigan Energy Data, (Washington, D.C.: June 1983).

TABLE XIX-32. SALES OF ELECTRIC ENERGY TO COMMERCIAL CONSUMERS IN MICHIGAN AND THE UNITED STATES, BY MONTH: 1974-1983

(Millions of killowatt-hours)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1974	1,081	1,057	1,036	997	984	1,041	1,114	1,178	1,134	1,056	1,053	1,104
1975	1,161	1,033	1,075	1,044	998	1,108	1,220	1,231	1,098	1,069	1,050	1,130
1976	1,208	1,079	1,105	1,046	1,076	1,130	1,264	1,210	1,207	1,113	1,086	1,252
1977	1,313	1,124	1,167	1,087	1,142	1,203	1,282	1,303	1,188	743	1,101	1,248
1978	1,300	1,147	1,176	1,098	1,084	1,217	1,249	1,338	1,290	1,215	1,138	1,243
1979	1,370	1,206	1,269	1,165	1,179	1,253	1,293	1,352	1,223	1,227	1,178	1,271
1980	1,343	1,214	1,282	1,213	1,159	1,202	1,324	1,425	1,293	1,237	1,184	1,282
1981	1,346	1,125	1,212	1,118	1,123	1,205	1,384	1,378	1,290	1,161	1,153	1,282
1982	1,308	1,170	1,202	1,139	1,121	1,182	1,291	1,315	1,203	1,159	1,121	1,232
1983	1,295	1,110	1,198	1,134	1,115	1,210	1,413	1,480	1,323	1,233	1,158	1,309
						United States						
1974	30,608	29,542	29,310	28,986	29,376	32,800	35,229	36,414	35,830	32,112	30,968	31,757
1975	33,026	31,459	31,194	31,335	30,926	34,665	37,631	38,576	37,325	32,817	31,608	32,596
1976	34,955	33,583	32,273	31,813	32,347	35,130	39,026	39,517	38,503	34,388	33,372	35,579
1977	37,598	36,105	34,249	33,180	34,291	37,658	41,863	42,483	41,062	36,655	34,075	35,714
1978	37,942	37,286	36,201	33,484	33,896	38,624	42,839	43,694	42,935	38,354	35,864	37,650
1979	40,200	39,670	37,938	35,731	36,259	39,174	42,528	43,915	42,416	38,750	36,656	37,952
1980	39,578	39,528	38,762	36,453	36,110	40,129	45,525	47,679	46,028	40,479	37,954	39,846
1981	43,229	41,345	39,541	37,910	39,331	44,244	48,989	49,003	45,877	42,183	38,746	40,782
1982	44,947	43,459	41,710	40,036	40,021	44,206	48,211	49,720	48,068	60,830	40,572	42,584
1983	44,019	42,475	41,518	40,679	40,305	45,086	51,013	53,245	52,147	45,517	42,666	45,119

SOURCE: Energy Information Administration, U.S. Department of Energy, Energy Data Report (Washington, D.C.: monthly). After October 1981, Electric Power Monthly (Washington, D.C.: monthly).

TABLE XIX-33. SALES OF ELECTRIC ENERGY TO ALL CONSUMERS IN MICHIGAN AND THE UNITED STATES BY MONTH: 1974-1983

(Millions of kilowatt-hours)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Michigan												
1974	5,610	5,521	5,308	5,290	5,216	5,379	5,541	5,833	5,747	5,578	5,479	5,364
1975	5,613	5,152	5,188	5,189	4,914	5,145	5,521	5,780	5,550	5,432	5,291	5,634
1976	6,072	5,643	5,799	5,563	5,509	5,761	5,993	5,954	5,881	5,614	5,733	6,227
1977	6,400	5,892	5,992	5,647	5,780	5,955	6,089	6,352	6,040	4,799	5,791	6,224
1978	6,492	5,903	5,983	5,892	5,771	6,052	6,084	6,393	6,364	6,293	6,024	6,252
1979	6,878	6,266	6,490	5,904	6,019	6,156	6,181	6,267	5,974	5,856	5,752	5,898
1980	6,278	5,886	6,079	5,737	5,165	5,156	5,719	6,105	5,900	5,860	5,714	6,082
1981	6,256	5,689	5,921	5,575	5,536	5,774	6,169	6,234	5,736	5,498	5,369	5,536
1982	5,927	5,415	5,656	5,389	5,223	5,392	5,800	5,793	5,379	5,195	5,046	5,420
1983	5,683	5,319	5,607	5,400	5,327	5,615	6,221	6,478	6,082	5,746	5,721	6,076
United States												
1974	144,203	137,060	136,157	133,387	133,162	142,113	151,528	157,844	154,431	141,135	136,071	140,978
1975	148,097	141,550	139,237	135,481	132,174	141,657	152,771	159,444	156,284	140,400	137,861	146,149
1976	158,903	151,949	145,839	140,728	140,123	147,550	161,224	166,792	162,750	148,778	148,758	160,798
1977	170,685	163,738	154,560	146,297	146,890	157,741	173,384	176,896	170,619	157,673	149,754	160,606
1978	174,372	168,291	161,950	148,883	149,914	163,981	177,607	182,666	181,015	166,722	159,125	168,709
1979	184,757	180,719	171,515	159,743	157,688	165,256	176,495	185,519	178,220	165,721	162,096	169,815
1980	179,585	178,720	174,373	161,703	154,851	164,872	185,882	196,205	190,139	170,080	162,174	175,607
1981	91,949	182,207	172,826	163,525	163,173	178,827	197,814	198,459	183,620	171,350	162,129	172,375
1982	192,079	182,805	173,959	164,512	158,569	168,739	183,567	189,740	178,296	163,416	160,479	170,278
1983	179,176	173,465	167,584	163,807	158,919	171,604	194,153	208,115	201,922	176,307	170,474	185,428

SOURCE: Energy Information Administration, U.S. Department of Energy, Energy Data Report (Washington, D.C.: monthly). After October 1981, Electric Power Monthly (Washington, D.C.: monthly).

TABLE XIX-34. MICHIGAN ELECTRIC UTILITY STATISTICS: 1981-1983

Company	Year	Number of customers	Sales to ultimate consumers ($000)	Sales to ultimate consumers Mwh	Peak demand for year (Mw)
		Privately owned utilities			
Alpena Power Company	1981	14,726	13,826	257,972	54
	1982	14,486	16,637	291,961	58
	1983	14,487	16,428	282,136	57
Consumers Power Company	1981	1,332,932	1,341,770	24,800,717	4,703
	1982	1,341,554	1,380,272	23,744,812	4,455
	1983	1,350,128	1,449,571	25,016,370	4,765
Detroit Edison Company	1981	1,765,709	1,897,662	32,822,442	7,171
	1982	1,763,902	2,027,694	31,994,682	6,394
	1983	1,763,785	2,134,522	32,762,193	7,063
Edison Sault Electric Co.	1981	15,523	11,443	343,166	80
	1982	15,789	12,258	342,516	80
	1983	15,967	13,975	340,182	79
Indiana & Michigan Electric[d]	1981	74,488	56,725	1,600,436	d
	1982	74,538	70,962	1,519,498	d
	1983	74,633	74,625	1,534,417	d
Lake Superior Dist.Pwr.[b]	1981	10,581	5,259	106,364	d
	1982	10,563	5,683	117,211	d
	1983	10,422	6,161	117,469	d
Michigan Power Company	1981	29,295	25,122	614,971	125
	1982	29,554	24,124	589,903	122
	1983	29,743	32,731	637,952	138
Upper Peninsula Power Co.	1981	59,383	40,232	618,439	140
	1982	59,309	50,692	680,370	139
	1983	59,201	55,058	718,617	134
Wisconsin Elec.Power Co.[d]	1981	22,230	16,358	280,966	d
	1982	22,430	16,840	260,289	d
	1983	22,542	19,057	264,768	d
Wisconsin Public Service Corporation[d]	1981	7,737	6,127	161,819	d
	1982	7,830	6,281	153,839	d
	1983	7,864	7,079	152,449	d

TABLE XIX-34. MICHIGAN ELECTRIC UTILITY STATISTICS: 1981-1983 (cont.)

Company	Year	Number of customers	Sales to ultimate consumers ($000)	Sales to ultimate consumers Mwh	Peak demand for year (Mw)
		Rural electric cooperative[e]			
Alger-Delta Co-op	1981	6,843	2,857	37,490	9
	1982	6,901	3,266	37,720	9
	1983	6,948	3,638	37,648	9
Cherryland R.E.C.	1981	15,860	9,063	119,473	26
	1982	16,105	9,909	121,683	28
	1983	16,364	10,208	126,325	29
Cloverland Elec. Co-op	1981	11,918	5,227	104,089	n.a.
	1982	11,950	5,756	102,641	35
	1983	12,063	6,118	102,575	21
Fruit Belt Elec. Co-op	1981	19,122	11,340	220,456	53
	1982	19,342	12,734	222,571	n.a.
	1983	19,556	14,258	222,365	n.a.
O & A Electric Co-op	1981	21,036	10,098	129,094	n.a.
	1982	21,188	12,156	129,437	30
	1983	21,418	11,159	126,445	29
Oceana Electric Co-op	1981	7,925	4,020	51,597	n.a.
	1982	7,948	4,792	51,478	n.a.
	1983	8,053	4,776	51,195	n.a.
Ontonagon County REA	1981	3,250	1,445	17,028	n.a.
	1982	3,258	1,617	16,583	4
	1983	3,259	1,803	16,557	4
Presque Isle	1981	22,676	8,954	118,575	27
	1982	22,732	10,804	118,054	28
	1983	22,720	10,861	120,931	28
Southeastern Mich. REA	1981	3,567	2,459	34,189	8
	1982	3,574	2,652	34,069	6
	1983	3,602	2,760	33,701	8
Thumb Electric Co-op	1981	9,122	6,063	83,949	21
	1982	9,196	6,259	83,556	23
	1983	9,262	6,762	83,621	20
Top O'Michigan REA	1981	32,438	16,602	223,743	53
	1982	32,786	19,266	235,417	55
	1983	33,283	20,505	251,315	59
Tri-county Electric Co-op	1981	15,751	10,342	132,608	30
	1982	15,824	11,925	131,456	38
	1983	15,962	11,737	134,175	32
Western Mich. Electric Co-op	1981	9,377	3,372	39,179	10
	1982	9,518	4,080	38,994	21
	1983	9,[illegible]90	3,984	39,093	10

SOURCE: Michigan Public Service Commission, special release.

a. Net utility plant.

b. Main system only. Does not include Pontiac systems.

c. Includes assets in natural gas system.

d. These utilities operate in more than one state, and the peak demand and total assets for Michigan are not given.

e. Excludes data for Bayfield Electric Co-op of Wisconsin. Bayfield also serves Iron River, Michigan. Michigan co-ops are located, respectively in Alger, Delta, Grand Traverse, Chippewa, Cass, Allegan, Oceana, Ontonagon, Presque Isle, Lenawee, Huron, Charlevoix, Ingham, and Mason counties.

TABLE XIX-35. NUMBER OF NATURAL GAS DISTRIBUTION UTILITY CUSTOMERS IN MICHIGAN, BY CLASS OF SERVICE: 1968-1982

(In thousands)

Year	Residential	Commercial	Industrial	Other	Total
1968	1,758.1	148.6	9.7	(L)	1,916.4
1969	1,810.3	153.7	9.9	(L)	1,973.9
1970	1,850.9	157.2	10.4	(L)	2,018.5
1971	1,907.0	161.5	10.0	(L)	2,079.2
1972	1,946.7	168.7	10.6	(L)	2,126.0
1973	1,984.4	174.6	10.9	(L)	2,169.9
1974	2,023.3	178.1	10.8	(L)	2,212.2
1975	2,048.7	175.4	10.4	(L)	2,234.5
1976	2,069.7	165.3	9.4	(L)	2,244.4
1977	2,100.7	159.3	9.0	(L)	2,269.1
1978	2,145.1	159.4	9.2	(L)	2,313.6
1979	2,206.3	158.0	9.4	(L)	2,373.7
1980	2,270.2	163.5	9.6	(L)	2,443.3
1981	2,311.2	163.5	9.7	(L)	2,484.4
1982	2,323.7	163.1	9.9	(L)	2,496.7

SOURCE: American Gas Association, *Gas Facts*, (Arlington, Va.: annually).

(L): Less than 50 customers.

TABLE XIX-36. TOTAL GAS REVENUES OF NATURAL GAS DISTRIBUTION UTILITIES IN MICHIGAN, BY CLASS OF SERVICE: 1968-1982

(In millions of dollars)

Year	Residential	Commercial	Industrial	Other	Total
1968	308	94	128	(L)	531
1969	328	104	156	3	591
1970	350	115	178	8	651
1971	362	129	205	7	703
1972	404	158	231	6	799
1973	394	169	245	5	813
1974	480	228	327	8	1,044
1975	550	303	404	12	1,269
1976	690	401	519	2	1,612
1977	784	423	530	8	1,746
1978	869	448	633	(L)	1,950
1979	1,023	488	725	(L)	2,236
1980	1,237	600	765	1	2,603
1981	1,391	662	869	(L)	2,921
1982	1,606	752	1,790	(L)	3,149

SOURCE: American Gas Association, *Gas Facts*, (Arlington, Va.: annually).

(L): Less than $500,000.

TABLE XIX-37. NUMBER OF NATURAL GAS CUSTOMERS OF MICHIGAN UTILITIES: 1981-1983 AVERAGES

Utility		Residential		Commercial		Industrial
		Nonheat	Heat	Nonheat	Heat	total[a]
Battle Creek Gas Company	1981	1,963	26,465	244	1,962	41
	1982	1,711	26,845	230	1,984	40
	1983	1,549	27,027	229	2,046	38
Citizens Gas Fuel Company	1981	658	8,462	47	794	29
	1982	616	8,651	46	799	32
	1983	561	8,894	47	829	29
Consumers Power Company	1981	33,070	1,036,887	1,844	66,410	7,209
	1982	29,679	1,053,944	1,925	67,164	7,195
	1983	27,266	1,065,150	1,947	68,370	7,158
Lake Superior District Power	1981	108	3,337	34	407	8
	1982	77	3,610	37	418	7
	1983	71	3,618	38	414	6
Mich. Consolidated Gas Company	1981	48,743	928,777	5,645	64,815	1,222
	1982	44,979	928,053	5,231	63,860	1,043
	1983	42,147	926,305	4,964	63,332	1,028
Michigan Gas Utilities Co.	1981	2,984	92,632	373	8,263	584
	1982	2,568	94,217	351	8,284	563
	1983	2,404	94,769	325	8,284	542
Michigan Power Company	1981	867	59,748	239	6,596	415
	1982	796	60,962	266	6,561	697
	1983	793	61,933	291	6,723	726
Peninsular Gas Company	1981	216	2,444	14	305	1
	1982	191	2,638	13	320	1
	1983	167	2,670	13	307	2
Southeastern Mich. Gas Company	1981	966	58,632	136	5,127	93
	1982	880	59,267	137	5,253	90
	1983	840	59,829	135	5,365	89
Wisconsin Public Service Co.	1981	344	3,913	21	275	77
	1982	306	3,955	19	277	74
	1983	284	3,997	20	297	60
TOTAL	1981	89,919	2,221,297	8,597	154,954	9,679
	1982	81,803	2,242,142	8,255	154,920	9,742
	1983	76,082	2,254,192	8,009	155,967	9,678

SOURCE: Michigan Public Service Commission, special release.

NOTE: Figures exclude interdepartmental customers, public authorities, and other gas utilities.

[a] Includes interruptible customers.

TABLE XIX-38. VOLUME OF NATURAL GAS SALES FOR CONSUMPTION BY MICHIGAN UTILITIES: 1981-1983

(Thousands of cubic feet)

Utility		Residential		Commercial		Industrial total[a]
		Nonheat	Heat	Nonheat	Heat	
Battle Creek Gas Company	1981	80,166	3,892,497	123,087	1,902,520	6,039,889
	1982	61,757	3,787,680	93,567	1,849,222	5,707,095
	1983	47,456	3,280,744	80,438	1,731,788	4,983,069
Citizens Gas Fuel Company	1981	27,407	1,213,262	25,747	561,229	999,215
	1982	24,402	1,203,940	24,548	558,594	825,897
	1983	22,489	1,176,859	27,710	509,750	976,082
Consumers Power Company	1981	1,576,457	161,392,589	3,755,415	59,469,980	82,314,788
	1982	1,317,035	158,216,470	6,664,297	55,556,497	64,280,244
	1983	1,102,886	154,165,778	6,663,713	53,176,691	57,656,991
Lake Superior District Power	1981	5,346	440,416	83,746	244,912	114,329
	1982	2,230	480,059	104,378	248,350	103,779
	1983	1,953	456,983	97,677	221,800	88,950
Michigan Consolidated Gas Company	1981	2,652,393	159,929,881	5,784,523	86,306,003	109,586,928
	1982	2,394,515	156,995,172	5,448,397	82,755,742	65,047,430
	1983	2,186,785	149,476,214	5,220,233	77,565,944	79,345,486
Michigan Gas Utilities Co.	1981	113,543	12,618,763	217,149	5,410,654	14,628,998
	1982	88,470	12,965,265	194,745	5,465,042	13,420,691
	1983	80,816	12,126,665	142,796	5,176,839	13,843,070
Michigan Power Company	1981	29,348	7,753,535	138,169	4,847,397	9,290,066
	1982	26,935	7,864,805	128,808	4,750,242	8,406,511
	1983	25,969	7,452,699	88,111	4,457,745	8,586,235
Peninsular Gas Company	1981	4,506	366,593	1,968	206,423	12,224
	1982	6,356	386,789	1,741	217,688	12,331
	1983	4,434	360,603	2,067	192,881	23,052
Southeastern Mich. Gas Company	1981	24,228	8,190,762	137,432	3,741,025	2,956,976
	1982	19,272	7,993,936	110,472	3,815,407	2,504,318
	1983	18,864	7,616,105	79,798	3,920,701	2,049,556
Wisconsin Public Service Co.	1981	104,225	5,129,206	34,321	889,513	4,295,113
	1982	95,179	5,175,247	35,940	895,850	3,879,083
	1983	85,387	4,848,448	46,506	870,537	2,763,951
TOTAL	1981	4,617,619	360,927,504	10,301,557	163,579,656	230,238,526
	1982	4,036,151	355,069,363	12,806,893	156,112,634	164,187,379
	1983	3,577,039	340,961,098	12,449,049	147,824,676	170,316,442

SOURCE: Michigan Public Service Commission, special release.

NOTE: Figures exclude interdepartmental sales, sales to public authorities, and sales to other gas utilities for resale.

a. Includes interruptible.

TABLE XIX-31. SALES OF ELECTRIC ENERGY TO RESIDENTIAL CONSUMERS IN MICHIGAN AND THE UNITED STATES, BY MONTH: 1974-1983

(Millions of killowatt-hours)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Michigan						
1974	1,977	1,837	1,734	1,631	1,538	1,523	1,645	1,745	1,687	1,558	1,589	1,888
1975	2,056	1,739	1,797	1,741	1,512	1,559	1,796	1,863	1,719	1,608	1,562	1,901
1976	2,225	1,801	1,827	1,612	1,578	1,636	1,767	1,792	1,666	1,618	1,700	2,100
1977	2,329	1,886	1,856	1,631	1,574	1,632	1,814	1,905	1,721	1,240	1,630	2,058
1978	2,296	1,874	1,908	1,708	1,602	1,657	1,740	1,828	1,821	1,758	1,702	1,964
1979	2,326	1,932	1,924	1,710	1,644	1,644	1,769	1,883	1,735	1,624	1,726	1,969
1980	2,239	1,847	1,946	1,782	1,609	1,596	1,858	2,030	1,940	1,726	1,745	2,008
1981	2,350	1,762	1,815	1,630	1,596	1,594	1,925	1,967	1,728	1,651	1,634	1,978
1982	2,308	1,879	1,813	1,709	1,510	1,563	1,829	1,836	1,647	1,592	1,635	1,956
1983	2,165	1,689	1,725	1,716	1,563	1,634	1,948	2,155	1,869	1,678	1,672	2,082
						United States						
1974	52,846	47,832	46,154	43,294	41,215	46,596	53,435	56,558	53,252	44,177	42,773	50,368
1975	55,546	50,219	47,968	46,883	41,077	45,766	53,972	57,291	54,362	43,024	42,054	50,213
1976	60,126	54,264	47,060	43,563	41,036	44,157	53,671	57,255	53,460	44,762	46,675	56,750
1977	65,332	61,424	50,859	44,414	41,568	48,419	60,969	62,821	57,248	48,741	44,959	54,919
1978	65,547	63,936	58,194	46,928	43,637	50,511	61,327	63,434	61,584	51,108	47,220	57,058
1979	69,912	67,470	58,806	49,647	45,378	49,109	58,064	64,168	59,251	49,430	49,480	58,437
1980	65,841	64,514	60,497	51,749	45,699	52,267	68,611	74,893	67,969	54,014	50,539	60,775
1981	74,087	66,359	57,660	50,914	48,348	56,165	68,990	70,299	60,173	51,989	50,754	60,826
1982	76,264	69,128	60,498	54,918	49,092	54,083	65,704	69,906	63,053	52,638	52,136	62,102
1983	69,967	65,039	58,912	56,284	49,669	54,138	69,965	78,374	73,197	55,374	53,704	66,326

SOURCE: Energy Information Administration, U.S. Department of Energy, Energy Data Report (Washington, D.C.: monthly) and after October 1981, Electric Power Monthly (Washington, D.C.: monthly).

TABLE XIX-39. TYPE OF FUEL USED IN HOUSEHOLDS IN MICHIGAN AND THE UNITED STATES: CENSUS 1980

Category	Michigan	United States
Occupied housing units	3,195,213	80,389,673
House heating fuel:		
Utility gas	2,430,003	42,657,625
Bottled, tank, or LP gas	125,609	4,534,825
Electricity	149,262	14,768,118
Fuel oil, kerosene, etc.	409,969	14,655,454
Coal or coke	6,224	504,172
Wood	66,732	2,575,560
Other fuel	6,046	152,643
No fuel used	1,368	541,276
Water heating fuel:		
Utility gas	2,228,874	42,148,105
Bottled, tank, or LP gas	137,482	3,990,045
Electricity	779,831	26,841,643
Fuel oil, kerosene, etc.	32,209	6,442,960
Other	8,934	348,189
No fuel used	7,883	618,731
Cooking fuel		
Utility gas	1,367,420	32,375,170
Bottled, tank, or LP gas	170,465	5,569,346
Electricity	1,647,393	41,905,579
Other	6,276	397,400
No fuel used	3,659	142,178

SOURCE: Bureau of the Census, 1980 Census of Housing, Detailed Housing Characteristics, Michigan, Table 62, and 1980 Census of Housing, Detailed Housing Characteristics, United States Summary, Table 82, (Washington, D.C.: 1983).

XX. WHOLESALE TRADE

The first postwar business census covered the year 1948, and subsequent censuses have been taken twice each decade. The current law authorizes the U.S. Bureau of the Census to canvas the nation's industrial and business establishments at five-year intervals in years ending in 2 and 7. These economic censuses cover construction industries, manufacturing, mining, retail trade, selected services, selected transportation, and wholesale trade.

Each establishment is classified on the basis of its major economic activity: selling merchandise to retailers; to industrial, commercial, institutional, farm or professional users; and to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to persons or companies classified as wholesalers. Also included are wholesale liquor establishments operated by state or local governments. The basic tabulations in this chapter do not include data for central administrative offices, captive warehouses, and other units that service or are auxiliary to wholesale establishments within the same organization.

The 1977 Census of Wholesale Trade covers all such establishments that have a payroll. Firms with payrolls were sent questionnaires for each establishment operated.

Sales reported in the Census of Wholesale Trade do not include wholesale sales incidental to other kinds of business, such as retailing or services. They do include total receipts, including accruals, of wholesale establishments even though some of these receipts were from servicing merchandise, carrying charges, delivering merchandise, retailing to households, and so forth. Refunds and allowances for merchandise returned are deducted. Sales and excise taxes are included, but nonoperating income (rental of real estate, interest or dividends on investments, and so forth) is not. Sales figures include sales so defined of all establishments in business at any time during the year, whereas the number of establishments in the Census of Retail Trade excludes those that have gone out of business during the year.

Payroll is as defined by the Internal Revenue Service. It includes wages and salaries, gratuities reported to the employer, commissions, bonuses, vacation and sick leave pay before deducting employee income taxes, Social Security taxes, union dues, and so forth.

Employment for the pay period including 12 March 1977 consists of paid employees of corporations and unincorporated businesses, including salaried officers and executives of corporations, but excluding proprietors and partners of unincorporated businesses. Employees on paid sick leave or holiday or on paid vacation also are included.

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TABLE XX-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF SALES WORKERS IN MICHIGAN AND THE UNITED STATES WHOLESALE TRADE ESTABLISHMENTS: 1956-1983

	Michigan				United States			
	Employment	Weekly[a]		Hourly	Employment	Weekly		Hourly
Year	(000)	Hours	Earnings	earnings[a]	(000)	Hours	Earnings	earnings
1956	103.5	40.3	85.72	2.13	3,018	40.5	78.57	1.94
1957	101.9	40.6	88.18	2.17	3,028	40.3	81.41	2.02
1958	103.2	40.9	87.57	2.14	2,980	40.2	84.02	2.09
1959	99.9	40.5	97.16	2.40	3,082	40.6	88.51	2.18
1960	102.9	40.4	99.59	2.47	3,143	40.5	90.72	2.24
1961	101.7	40.7	102.56	2.52	3,133	40.5	93.56	2.31
1962	104.7	40.8	104.33	2.56	3,198	40.6	96.22	2.37
1963	105.9	41.7	109.34	2.62	3,248	40.6	99.47	2.45
1964	111.3	43.3	118.70	2.74	3,337	40.7	102.56	2.52
1965	119.8	43.3	127.43	2.94	3,466	40.8	106.49	2.61
1966	127.9	43.7	136.56	3.13	3,597	40.7	111.11	2.73
1967	133.1	45.8	147.29	3.22	3,689	40.3	116.06	2.88
1968	135.8	41.0	133.91	3.27	3,779	40.1	122.31	3.05
1969	137.4	40.6	155.01	3.82	3,907	40.2	129.85	3.23
1970	144.8	40.2	165.06	4.11	3,993	39.9	137.26	3.44
1971	144.8	39.7	173.73	4.38	4,001	39.5	144.18	3.65
1972	146.0	39.7	184.18	4.63	4,113	39.4	151.69	3.85
1973	150.6	40.1	197.13	4.92	4,277	39.3	160.34	4.08
1974	153.5	39.8	211.48	5.31	4,433	38.8	170.33	4.39
1975	146.9	41.2	253.63	6.16	4,415	38.7	183.05	4.73
1976	148.8	39.2	244.81	6.25	4,546	38.7	194.66	5.03
1977	151.8	39.1	257.55	6.59	4,708	38.8	209.13	5.39
1978	164.2	39.6	292.41	7.38	4,969	38.8	228.14	5.88
1979	170.4	38.6	304.13	7.88	5,204	38.8	247.93	6.39
1980	161.5	39.1	331.80	8.49	5,275	38.5	267.96	6.96
1981	157.9	39.8	371.78	9.33	5,359	38.6	292.20	7.57
1982	150.7	39.0	381.18	9.78	5,280	n.a.	n.a.	n.a.
1983	147.8	38.5	385.20	10.00	5,232	n.a.	n.a.	n.a.

SOURCE: Michigan Employment Security Commission Special release, and Bureau of Labor Statistics, Supplement to Employment and Earnings, Revised Establishment Data, (Washington, D.C.: 1983), p. 182.

a. Durable goods wholesalers only.

n.a.: not available

TABLE XX-2. SUMMARY STATISTICS FOR WHOLESALE TRADE ESTABLISHMENTS IN MICHIGAN AND THE UNITED STATES: 1947, 1954, 1958, 1963, 1967, 1972, AND 1977

	Establishments with payroll							
	Number[a] (000)		Sales ($1,000,000)		Annual payroll ($1,000,000)		Paid employees[b] (000)	
Year	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.
1947[c]	8,485	243,366	6,721	188,689	319	7,991	88,725	2,382,789
1947	7,600	216,099	n.a.	n.a.	298	7,734	83,138	2,305,403
1954	9,441	250,322	10,087	233,976	479	10,868	99,793	2,590,361
1958	10,797	285,996	11,600	284,971	547	13,199	105,273	2,797,341
1963	11,635	308,177	14,055	358,386	711	18,101	113,845	3,088,706
1967	11,436	311,464	18,800	459,476	976	23,922	131,751	3,518,969
1972[d]	12,208	348,168	26,238	683,659	1,369	35,887	133,359	3,878,181
1972[e]	12,827	369,791	26,546	695,224	1,397	36,893	137,037	4,026,118
1977[e]	12,572	382,837	45,152	1,258,400	2,109	58,290	141,484	4,397,089

SOURCE: Bureau of the Census, 1977 Census of Wholesale Trade, Geographic Area Statistics, Advance Report (Washington, D.C.: 1980), WC77-A-23(A), Table 1; U.S. Census of Wholesale Trade, 1972, Area Series, Michigan (Washington, D.C.: 1974), WC72-A-23, Table I and 5; and Bureau of the Census, U.S. Census of Business, 1967, Wholesale Trade, Michigan (Washington, D.C.: 1969), BC67-WA24, Table 2, and similar census documents for 1963 (BC63-WA24, Table 2), 1958 (BC58-WA22, Table 101), 1954 (W-1-22, Tables 101 and 105), and 1947 (vol. 5, Michigan section, Table 101), and similar documents for the U.S.

a. Excludes establishements with no paid employment.
b. Week including 15 November for 1947-1963; week including 12 March for 1967 and 1972.
c. Unrevised statistics. Based upon reports from establishments with sales volume of $5,000 or over.
d. Based on 1967 Standard Industrial Classification.
e. Based on 1972 Standard Industrial Classification.

TABLE XX-3. RANKING OF MICHIGAN COUNTIES ACCORDING TO EARNINGS IN WHOLESALE TRADE ESTABLISHMENTS AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

County	Percentage 1972	Percentage 1982	County	Percentage 1972	Percentage 1982
Antrim	1.27	13.10	Delta	3.53	3.19
Dickinson	6.78	10.24	Ionia	1.98	3.12
Osceola	2.91	9.76	Lenawee	2.06	3.09
Oakland	6.74	8.99	Marquette	2.64	2.84
Tuscola	6.34	8.93	Lapeer	2.33	2.83
Kent	8.11	8.82	Monroe	2.21	2.75
Branch	6.58	7.33	Cass	4.09	2.75
Genesee	6.14	7.01	St. Clair	3.97	2.70
Huron	2.79	6.41	Mason	1.63	2.67
Bay	6.08	6.13	Chippewa	2.14	2.59
Menominee	5.74	5.87	Keweenaw	2.15	2.59
Wayne	7.30	5.84	Missaukee	2.56	2.52
Montcalm	2.44	5.41	Presque Isle	1.62	2.49
Isabella	5.01	5.23	Mackinac	2.94	2.39
Hillsdale	3.51	5.10	Clare	1.23	2.26
Emmet	6.24	5.04	Calhoun	2.74	2.26
Grand Traverse	4.08	5.03	Oceana	1.92	2.26
Eaton	2.15	4.72	St. Joseph	3.31	2.19
Shiawassee	3.40	4.59	Washtenaw	1.86	2.15
Alpena	3.66	4.52	Mecosta	1.14	1.64
Ottawa	4.40	4.34	Charlevoix	2.00	1.47
Kalamazoo	4.03	4.17	Roscommon	2.37	1.42
Wexford	4.79	4.13	Alger	2.26	1.37
Berrien	2.92	4.06	Crawford	2.14	1.25
Ogemaw	2.79	3.89	Luce	3.14	1.24
Allegan	2.32	3.76	Cheboygan	2.64	1.17
Sanilac	1.64	3.76	Baraga	(D)	1.11
Gratiot	3.39	3.71	Benzie	0.88	1.06
Livingston	2.88	3.69	Alcona	(D)	0.91
Macomb	3.11	3.64	Schoolcraft	(D)	0.70
Houghton	2.47	3.62	Ontonagon	0.75	0.64
Arenac	5.90	3.61	Barry	1.64	(D)
Otsego	3.00	3.57	Clinton	3.78	(D)
Gladwin	2.99	3.51	Iosco	(D)	(D)
Ingham	3.43	3.47	Iron	4.89	(D)
Gogebic	(D)	3.38	Lake	1.52	(D)
Newaygo	1.82	3.36	Leelanau	(D)	(D)
Saginaw	4.61	3.31	Midland	0.81	(D)
Muskegon	3.62	3.29	Montmorency	(D)	(D)
Manistee	3.75	3.27	Oscoda	(D)	(D)
Jackson	3.58	3.26			
Kalkaska	(D)	3.25	Michigan	5.54	5.49
Van Buren	2.57	3.24	United States	6.06	6.88

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XX-4. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN WHOLESALE TRADE ESTABLISHMENTS: 1981-1982

County	Percentage change		County	Percentage change	
	1972-1982	1981-1982		1972-1982	1981-1982
Alger	21	28	Branch	133	-2
Dickinson	251	20	St. Joseph	38	-3
Gladwin	155	18	Gratiot	109	-4
Cass	30	17	Schoolcraft	(D)	-5
Otsego	236	15	Lenawee	146	-6
Isabella	182	15	Marquette	140	-6
Washtenaw	202	13	Huron	368	-7
Grand Traverse	280	9	Chippewa	69	-7
Presque Isle	216	9	Baraga	(D)	-7
Allegan	273	9	Ogemaw	223	-9
Kent	162	8	Mason	161	-10
Houghton	232	8	Berrien	133	-10
Mackinac	74	8	St. Clair	55	-22
Sanilac	292	8	Benzie	154	-27
Newaygo	276	7	Alcona	(D)	(D)
Saginaw	38	6	Antrim	1,981	(D)
Wexford	131	5	Arenac	35	(D)
Gogebic	(D)	5	Barry	(D)	(D)
Tuscola	200	4	Calhoun	57	(D)
Ottawa	154	3	Cheboygan	-3	(D)
Kalamazoo	156	3	Clare	305	(D)
Charlevoix	69	2	Clinton	(D)	(D)
Lapeer	167	2	Crawford	55	(D)
Montcalm	405	2	Eaton	366	(D)
Livingston	248	2	Iosco	(D)	(D)
Emmet	76	2	Iron	(D)	(D)
Genesee	131	2	Kalkaska	(D)	(D)
Alpena	129	1	Keweenaw	9	(D)
Oakland	240	1	Lake	(D)	(D)
Monroe	192	1	Leelanau	(D)	(D)
Hillsdale	190	1	Luce	-5	(D)
Bay	108	0	Manistee	77	(D)
Delta	109	0	Midland	(D)	(D)
Ingham	141	0	Missaukee	121	(D)
Ontonagon	19	0	Montmorency	(D)	(D)
Van Buren	158	0	Muskegon	83	(D)
Ionia	229	0	Oceana	163	(D)
Jackson	72	-1	Osceola	616	(D)
Menominee	128	-1	Oscoda	(D)	(D)
Mecosta	225	-1	Roscommon	40	(D)
Shiawassee	144	-1			
Wayne	32	-1	Michigan	99	1
Macomb	130	-1	United States	177	5

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

XXI. RETAIL TRADE

The first postwar business census was for 1948. Currently, the U.S. Bureau of the Census is authorized to conduct canvasses every five years, for years ending in 2 and 7. These economic censuses of industrial and business establishments cover construction, manufacturing, mining, retail trade, selected services, selected transportation industries, and wholesale trade. Establishments are classified on the basis of major economic activity, and those primarily engaged in selling goods for personal or household consumption are grouped under retail trade. They are further classified according to kind of business, which usually reflects commodity groupings. For example, food stores include establishments primarily selling food for preparation and consumption in the home. In some cases, such as variety stores, the classification is based on variety of merchandise, price range, or manner of doing business.

Beginning in 1954, the Census of Retail Trade has excluded firms with no paid employees during the census year unless they reported sales of $2,500 or more. Firms with no paid employees were not canvased, their sales figures and classification being obtained from income tax returns.

It is customary in a economic census to classify each establishment separately, irrespective of whether it is part of a larger organization. For example, each McDonald's is counted as one restaurant.

Sales reported in the Census of Retail Trade do not include retail sales incidental to other kinds of business, such as wholesaling or services. They do include total receipts, including accruals, of retail establishments, even though some of these receipts were from servicing merchandise, carrying charges, delivering merchandise, wholesaling to other retailers, and so forth. Trade-in allowances are not deducted, but refunds and allowances for merchandise returned are. Sales and excise taxes are included, but nonoperating income (rental of real estate, interest or dividends on investments, and so forth) is not. Sales figures include sales so defined of all establishments with a sales volume of $2,500 or more at any time during the year, whereas the number of establishments in the Census of Retail Trade excludes those that have gone out of business during the year. Also included are establishments in operation less than the full year with reported sales of less than $2,500, if they could have expected reaching the $2,500 figure on the basis of year-round operation.

Payroll is as defined by the Internal Revenue Service. It includes wages and salaries, gratuities reported to the employer, commissions, bonuses, vacation and sick leave pay before deducting employees' income taxes, Social Security taxes, union dues, and so forth. Payments in Kind, such as free restaurant meals, are included.

Employment for the pay period including 12 March 1977 consists of paid employees of corporations and unincorporated businesses, including salaried officers and executives of corporations, but excluding proprietors and partners of unincorporated businesses. Employees on paid sick leave or on holiday or paid vacation also are included.

All data exclude the activities of central administrative offices such as Kresge Headquarters in Troy. Auxiliaries, such as regional warehouses that supply retail outlets but conduct no retail business themselves, are excluded also.

Monthly Retail Trade, a publication of the U.S. Bureau of the Census, is based upon reports from a sample of establishments in the United States. Separate data on sales volume also are available for large states and Standard Metropolitan Statistical Areas.

The Michigan Liquor Control Commission has a monopoly on the wholesaling of liquor (but not beer and wine) in the state. It also licenses all retail outlets for consumption of liquor, wine, and beer on or off premises.

National Petroleum News, a McGraw-Hill, Inc., publication, presents a variety of information about branded gasoline service stations in its mid-May fact book issue. Some very small independent organizations are not listed, however. Table XXI-10 covers those that are.

Personal income data are released by the Bureau of Economic Analysis, U.S. Department of Commerce. Personal income statistics are discussed in chapter VI.

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TABLE XXI-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF SALES WORKERS IN MICHIGAN AND THE UNITED STATES RETAIL TRADE ESTABLISHMENTS: 1956-1983

	Michigan				United States			
	Employment (000)	Weekly		Hourly earnings	Employment (000)	Weekly		Hourly earnings
Year		Hours	Earnings			Hours	Earnings	
1956	370.6	38.9	65.55	1.69	7,840	38.6	50.18	1.30
1957	356.0	37.6	65.46	1.74	7,858	38.1	52.20	1.37
1958	332.1	37.1	64.18	1.73	7,770	38.1	54.10	1.42
1959	322.9	37.3	66.32	1.78	8,045	38.2	56.15	1.47
1960	348.0	37.6	67.27	1.79	8,247	38.0	57.76	1.52
1961	340.1	38.0	69.58	1.83	8,204	37.6	58.66	1.56
1962	342.4	37.7	74.04	1.96	8,368	37.4	60.96	1.63
1963	345.0	38.7	74.57	1.93	8,530	37.3	62.66	1.68
1964	365.2	38.4	72.69	1.92	8,823	37.0	64.75	1.75
1965	390.7	38.5	76.73	1.99	9,250	36.6	66.61	1.82
1966	410.7	37.6	78.88	2.10	9,648	35.9	68.57	1.91
1967	419.7	37.0	81.25	2.20	9,917	35.3	70.95	2.01
1968	433.8	36.1	86.50	2.40	10,320	34.7	74.95	2.16
1969	455.9	35.0	93.98	2.69	10,798	34.2	78.66	2.30
1970	458.3	34.4	97.87	2.85	11,047	33.8	82.47	2.44
1971	460.7	34.3	108.18	3.15	11,351	33.7	87.62	2.60
1972	478.9	35.1	118.32	3.38	11,836	33.4	91.85	2.75
1973	503.3	34.6	124.84	3.61	12,329	33.1	96.32	2.91
1974	510.9	34.3	129.08	3.77	12,554	32.7	102.68	3.14
1975	509.6	34.5	141.62	4.11	12,645	32.4	108.86	3.36
1976	531.1	33.9	146.12	4.31	13,209	32.1	114.60	3.57
1977	557.1	34.0	156.88	4.61	13,808	31.6	121.66	3.85
1978	584.9	34.0	174.22	5.12	14,573	31.0	130.20	4.20
1979	590.9	33.2	186.32	5.61	14,989	30.6	138.62	4.53
1980	572.1	32.0	187.29	5.85	15,035	30.2	147.38	4.88
1981	556.8	33.3	214.50	6.44	15,189	30.1	158.03	5.25
1982	542.6	33.6	231.65	6.90	15,122	n.a.	n.a.	n.a.
1983	542.8	32.7	236.13	7.22	15,281	n.a.	n.a.	n.a.

SOURCE: Michigan Employment Security Commission Special Release, and Bureau of Labor Statistics, Supplement to Employment and Earnings, Revised Establishment Data (Washington, D.C.: 1983), p. 191.

n.a.: not available

TABLE XXI-2. SUMMARY STATISTICS FOR RETAIL TRADE ESTABLISHMENTS IN MICHIGAN AND THE UNITED STATES: 1947, 1954, 1958, 1963, 1967, 1972 AND 1977

	All establishments[a]				Establishments with payroll							
	Number (000)		Sales ($1,000,000)		Number (000)		Sales ($1,000,000)		Annual payroll ($1,000,000)		Paid employees[b] (000)	
Year	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.	Mich.	U.S.
1947[c]	68,756	1,771,317	5,950	130,520	n.a.	n.a.	n.a.	n.a.	663	14,186	311	7,083
1947	65,990	1,668,479	5,854	128,849	48,040	1,118,692	5,477	118,352	n.a.	n.a.	n.a.	n.a.
1954	67,995	1,721,650	8,168	169,968	50,331	1,124,040	7,776	157,933	879	18,199	325	7,124
1958	72,379	1,794,744	8,898	200,365	52,291	1,185,036	8,471	187,768	946	21,673	337	7,942
1963	69,758	1,707,931	10,855	244,202	51,568	1,206,087	10,431	233,085	1,110	27,632	340	8,410
1967	63,569	1,763,324	14,114	310,214	46,921	1,191,546	13,667	295,170	1,553	36,175	398	9,380
1972[d]	72,413	1,934,466	20,938	470,806	49,729	1,286,517	20,301	451,987	2,412	56,385	466	11,360
1972[e]	71,795	1,912,871	20,630	459,040	49,111	1,264,922	19,993	440,222	2,383	55,372	462	11,210
1972[f]	65,854	1,780,441	20,546	457,405	49,111	1,264,922	19,993	440,222	2,383	55,372	462	11,210
1977[f]	67,059	1,855,068	31,912	723,134	48,431	1,303,621	31,090	699,635	3,720	85,854	524	13,040

SOURCE: Bureau of the Census, 1977 Census of Retail Trade, Geographic Area Series, Michigan (Washington, D.C.: 1979), RC77-A-23, Table 1; Bureau of the Census, U.S. Census of Retail Trade, 1972, Area Series Michigan (Washington, D.C.: 1974), RC72-A-23, Table 1 and 7; Bureau of the Census, U.S. Census of Business, 1967, Retail Trade, Michigan (Washington, D.C.: 1969), BC67-RA24, Table 2, and similar census documents for 1963 (BC63-RA24, Table 2), 1958 (BC58-RA22, Table 101), 1954 (R-A-22, Tables 101 and 101A), and 1948 (vol. 3 Michigan section, Table 101); and similar documents for the United States.

a. Excludes establishments with no paid employment and with annual sales volume less than $2,500.
b. Week including 15 November for 1947-1963; week including 12 March for 1967.
c. Unrevised statistics. Based upon reports from establishments with sales volume of $500 or over.
d. Based on 1967 Standard Industrial Classification.
e. Based on 1972 Standard Industrial Classification, including direct selling establishments without payroll.
f. Based on 1972 Standard Industrial Classification, excluding direct selling establishments without payroll.
n.a.: not available.

TABLE XXI-4. ESTIMATED MONTHLY SALES BY RETAIL STORES IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, THE STATE OF MICHIGAN AND THE UNITED STATES: 1978-1983

(Millions of dollars)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
					Detroit SMSA*							
1978	1,092	1,144	1,363	1,355	1,453	1,499	1,374	1,456	1,421	1,533	1,567	1,882
1979	1,337	1,325	1,575	1,520	1,620	1,676	1,539	1,579	1,498	1,604	1,684	2,009
1980	1,509	1,469	1,598	1,567	1,620	1,687	1,693	1,656	1,601	1,775	1,737	2,144
1981	1,643	1,536	1,829	1,844	1,835	1,783	1,733	1,674	1,659	1,738	1,682	2,050
1982	1,361	1,332	1,569	1,581	1,692	1,636	1,613	1,555	1,582	1,671	1,672	2,105
1983	1,487	1,469	1,763	1,693	1,796	1,888	1,786	1,772	1,742	1,778	1,883	2,357
					Michigan*							
1978	2,118	2,243	2,707	2,699	2,936	3,026	2,848	3,024	2,878	3,088	3,144	3,596
1979	2,642	2,603	3,095	3,038	3,246	3,278	3,106	3,243	3,037	3,302	3,351	3,826
1980	2,935	2,847	3,081	3,051	3,194	3,158	3,324	3,234	3,100	3,427	3,314	3,961
1981	3,077	2,898	3,348	3,439	3,499	3,481	3,480	3,381	3,297	3,450	3,289	3,959
1982	2,730	2,707	3,136	3,241	3,459	3,345	3,383	3,219	3,204	3,343	3,384	4,101
1983	2,892	2,838	3,417	3,413	3,596	3,790	3,625	3,624	3,568	3,616	3,755	4,524
					United States*							
1978	53,340	53,836	65,167	64,334	68,553	69,759	67,319	69,981	67,110	69,593	72,314	85,592
1979	62,869	61,671	73,428	71,693	75,988	76,091	73,400	79,271	73,942	77,812	80,311	92,903
1980	70,903	70,915	76,298	75,548	79,712	77,799	70,291	82,211	77,948	84,402	84,032	100,908
1981	77,115	74,056	84,267	85,616	87,380	87,640	88,597	89,419	85,872	89,176	87,754	100,632
1982	77,180	76,097	86,472	87,869	90,708	88,869	91,053	89,499	88,070	91,327	94,176	113,241
1983	81,288	78,863	93,740	93,856	97,831	100,605	99,444	100,131	97,926	100,658	103,865	125,759

SOURCE: Bureau of the Census, Revised Monthly Retail Sales and Inventories: January 1974 through December 1983, Current Business Reports, (Washington, D.C.: 1984), Tables 1, 5 and 6.

*: data not adjusted for seasonal variations, holidays or trading-day differences.

TABLE XXI-5. DEPARTMENT STORE SALES AND NUMBER OF DEPARTMENT STORES IN SELECTED MICHIGAN STANDARD METROPOLITAN STATISTICAL AREAS AND CITIES: 1980, 1981 AND 1983

	1980		1981		1982	
	Sales ($000)	Number of stores	Sales ($000)	Number of stores	Sales ($000)	Number of stores
SMSAs						
Ann Arbor	167,154	11	178,151	11	n.a.	n.a.
Detroit	2,116,864	115	2,217,264	121	2,458,050	120
Flint	313,463	22	333,866	23	378,178	19
Grand Rapids	435,318	27	465,648	27	509,449	24
Jackson	113,188	6	123,347	7	n.a.	n.a.
Kalamazoo-Portage	194,375	18	215,721	19	366,176	16
Lansinq-East Lansing	309,371	14	324,176	16	n.a.	n.a.
Muskegon-Muskegon Heights-Norton Shores	108,757	7	116,027	7	n.a.	n.a.
Cities						
Battle Creek	D	2	D	3	n.a.	n.a.

SOURCE: Bureau of the Census, Monthly Retail Trade, Sales and Accounts Receivable, December 1981 (Washington, D.C.: annually), and Monthly Retail Trade, Sales and Sales Inventory, February 1984, (Washington, D.C.: monthly), BR-81-12, Tables 8 and 8A.

D: Withheld to avoid disclosing data for individual companies.

NOTE: Data for 1982 is not available.

TABLE XXI-6. RANKING OF MICHIGAN COUNTIES ACCORDING TO EARNINGS IN RETAIL TRADE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

County	Percentage		County	Percentage	
	1972	1982		1972	1982
Roscommon	28.14	21.65	Lapeer	11.55	9.92
Clare	23.43	21.54	Montcalm	12.38	9.86
Ogemaw	20.65	20.68	Jackson	9.94	9.83
Keweenaw	7.91	20.46	Barry	9.72	9.83
Cheboygan	19.41	20.19	Macomb	8.19	9.73
Mackinac	19.94	19.27	Alger	12.97	9.70
Alcona	20.29	18.62	Delta	13.98	9.69
Montmorency	16.39	17.54	Sanilac	11.96	9.55
Missaukee	18.32	17.50	Mason	9.42	9.52
Lake	15.45	17.45	Marquette	9.32	9.49
Arenac	19.63	17.12	St. Clair	12.18	9.39
Gogebic	15.68	17.06	Van Buren	11.29	9.09
Crawford	19.78	17.02	Tuscola	11.94	9.07
Otsego	16.77	15.42	Saginaw	9.23	9.05
Emmet	17.93	14.74	Baraga	9.05	8.98
Gladwin	15.61	14.58	Iosco	10.35	8.98
Oscoda	17.62	14.54	Huron	12.40	8.89
Livingston	14.93	14.33	Lenawee	9.89	8.88
Leelanau	12.96	14.28	Allegan	10.89	8.87
Oceana	19.19	13.79	Berrien	10.10	8.83
Schoolcraft	16.57	13.75	Muskegon	9.33	8.81
Benzie	14.56	13.35	Ottawa	8.96	8.78
Eaton	18.34	12.85	Hillsdale	11.20	8.66
Chippewa	10.79	12.47	Menominee	10.11	8.66
Houghton	15.87	12.06	Charlevoix	12.50	8.66
Grand Traverse	16.62	11.82	Kalamazoo	9.49	8.40
Isabella	12.82	11.79	Osceola	10.21	8.39
Wexford	14.23	11.16	Branch	9.86	8.32
Oakland	11.21	11.14	Monroe	11.46	8.25
Kent	13.23	11.11	Presque Isle	12.81	7.98
Iron	15.55	11.00	Kalkaska	21.45	7.80
Bay	12.59	10.79	Calhoun	9.15	7.76
Newaygo	11.58	10.74	Wayne	9.16	7.50
Mecosta	11.61	10.72	Genesee	8.30	7.25
Antrim	12.41	10.71	Ingham	8.35	7.17
Ionia	12.32	10.67	Luce	10.24	6.56
Manistee	10.36	10.52	Washtenaw	8.00	6.33
St. Joseph	10.55	10.51	Cass	9.45	6.26
Gratiot	10.53	10.39	Ontonagon	5.69	5.94
Shiawassee	11.97	10.23	Midland	6.00	4.80
Alpena	12.53	10.19			
Clinton	12.26	10.00	Michigan	9.88	8.86
Dickinson	12.50	9.97	United States	10.62	9.41

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE XXI-7. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN RETAIL TRADE: 1981-1982

	Percentage change			Percentage change	
County	1972-1982	1981-1982	County	1972-1982	1981-1982
Leelanau	106	13	Macomb	134	1
St. Joseph	107	12	Gladwin	103	0
Mackinac	107	11	Ionia	80	0
Ogemaw	132	11	Lapeer	89	0
Crawford	128	9	Saginaw	89	0
Roscommon	81	7	Hillsdale	54	0
Huron	46	7	St. Clair	76	0
Lake	61	7	Branch	77	0
Menominee	91	6	Houghton	72	0
Osceola	75	6	Lenawee	47	0
Eaton	49	6	Tuscola	62	0
Emmet	79	6	Montcalm	81	0
Kent	103	5	Berrien	47	0
Newaygo	88	5	Bay	77	0
Clare	102	5	Mason	61	-1
Delta	60	5	Oceana	61	-1
Van Buren	64	4	Monroe	69	-1
Wexford	110	4	Jackson	86	-1
Iosco	59	4	Ontonagon	45	-1
Mecosta	108	4	Arenac	93	-2
Charlevoix	59	4	Kalkaska	120	-2
Ingham	105	3	Iron	52	-2
Dickinson	85	3	Montmorency	64	-2
Gratiot	89	3	Wayne	35	-2
Ottawa	152	3	Chippewa	61	-3
Manistee	106	3	Shiawassee	54	-3
Allegan	87	3	Presque Isle	28	-3
Marquette	127	3	Genesee	77	-3
Alcona	81	2	Calhoun	61	-3
Gogebic	94	2	Sanilac	37	-4
Grand Traverse	119	2	Baraga	53	-4
Alger	50	2	Oscoda	50	-4
Otsego	160	2	Alpena	51	-5
Oakland	154	2	Antrim	74	-5
Kalamazoo	119	2	Clinton	80	-5
Muskegon	90	2	Benzie	92	-5
Livingston	161	2	Luce	53	-6
Missaukee	114	1	Barry	101	-9
Midland	103	1	Cass	28	-11
Isabella	149	1	Keweenaw	134	-13
Cheboygan	127	1			
Washtenaw	107	1	Michigan	80	0
Schoolcraft	96	1	United States	116	5

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

TABLE XXI-8. LICENSES ISSUED BY REASON AND CLASS AND BY COUNTY: MAY 1, 1983-APRIL 30, 1984

County	Food service establishments			Mobile establishments			Vending machine locations			Class totals			County total
	Renewal	New owner	New establishment	Renewal	New owner	New establishment	Renewal	New owner	New establishment	Renewal	New owner	New establishment	
Alcona	53	2	5	--	--	--	--	--	--	53	2	5	60
Alger	55	7	1	--	--	1	--	--	--	55	7	2	64
Allegan	249	17	29	7	1	5	16	6	1	272	24	35	331
Alpena	97	12	9	--	--	--	16	--	3	113	12	12	137
Antrim	75	4	3	--	--	1	--	--	--	75	4	4	83
Arenac	56	6	4	--	--	2	1	--	--	57	6	6	69
Baraga	38	1	2	--	--	--	1	--	--	39	1	2	42
Barry	103	8	9	3	2	5	20	--	1	126	10	15	151
Bay	332	52	25	2	--	--	28	9	3	362	61	28	451
Benzie	54	5	7	--	--	--	2	--	--	56	5	7	68
Berrien	531	41	46	4	1	9	76	10	33	611	52	88	751
Branch	116	7	9	1	--	1	16	--	--	133	7	10	150
Calhoun	418	31	29	1	1	--	67	15	42	486	47	71	604
Cass	130	7	11	3	--	6	25	--	3	158	7	20	185
Charlevoix	99	10	5	2	--	2	--	--	--	101	10	7	118
Cheboygan	110	9	8	--	--	--	4	--	--	114	9	8	131
Chippewa	173	10	12	2	--	--	--	--	--	175	10	12	197
Clare	87	8	10	3	2	4	3	--	--	93	10	14	117
Clinton	137	10	8	2	--	1	8	--	--	147	10	9	166
Crawford	52	2	4	--	--	--	--	--	--	52	2	4	58
Delta	159	15	5	5	--	1	3	16	4	167	31	10	208
Dickinson	111	9	8	--	--	--	13	--	2	124	9	10	143
Eaton	262	10	12	5	1	--	24	--	2	291	11	14	316
Emmet	136	10	7	1	--	1	--	--	--	137	10	8	155
Genesee	1,214	80	104	22	3	8	169	32	28	1,405	115	140	1,660
Gladwin	59	--	7	2	--	--	2	--	--	63	--	7	70
Gogebic	121	4	3	--	--	1	--	--	--	121	4	4	129
Grand Traverse	190	11	10	3	3	1	33	--	3	226	14	14	254
Gratiot	116	8	11	1	--	--	4	--	--	121	8	11	140
Hillsdale	98	11	4	1	1	1	22	--	1	121	12	6	139

TABLE XXI-8. LICENSES ISSUED BY REASON AND CLASS AND BY COUNTY: MAY 1, 1983-APRIL 30, 1984 (cont.)

County	Food service establishments			Mobile establishments			Vending machine locations			Class totals			County total
	Renewal	New owner	New establishment	Renewal	New owner	New establishment	Renewal	New owner	New establishment	Renewal	New owner	New establishment	
Houghton	165	3	11	--	--	--	4	--	3	169	3	14	186
Huron	160	13	14	--	--	--	23	--	--	183	13	14	210
Ingham	720	48	51	6	1	3	136	--	26	862	49	80	991
Ionia	148	10	6	5	--	5	12	--	2	165	10	13	188
Iosco	114	9	10	2	--	--	--	--	--	116	9	10	135
Iron	73	11	5	2	--	--	2	--	--	77	11	5	93
Isabella	128	9	7	1	--	4	7	--	1	136	9	12	157
Jackson	444	40	17	10	1	9	78	1	37	532	42	63	637
Kalamazoo	634	39	57	3	--	6	97	13	25	734	52	88	874
Kalkaska	40	3	1	--	--	--	1	--	--	41	3	1	45
Kent	1,096	88	67	33	4	14	241	30	243	1,370	122	324	1,816
Keweenaw	23	1	--	--	--	--	--	--	1	23	1	1	25
Lake	40	1	2	--	--	1	--	--	--	40	1	3	44
Lapeer	146	17	23	4	--	1	6	--	2	156	17	26	199
Leelanau	66	5	4	--	--	--	1	--	--	67	5	4	76
Lenawee	287	23	8	3	--	2	32	1	1	322	24	11	357
Livingston	186	24	21	3	--	3	23	--	--	212	24	24	260
Luce	37	2	2	--	--	1	--	--	--	37	2	3	42
Mackinac	118	14	2	2	--	--	--	--	--	120	14	2	136
Macomb	1,876	163	125	15	6	9	544	16	87	2,435	185	221	2,841
Manistee	118	10	4	2	--	2	--	--	9	120	10	15	145
Marquette	235	22	18	2	2	1	18	--	4	255	24	23	302
Mason	121	15	6	4	--	1	2	--	4	127	15	11	153
Mecosta	104	7	13	3	--	--	4	18	2	111	25	15	151
Menominee	101	11	5	--	--	2	1	12	3	102	23	10	135
Midland	175	14	14	2	--	1	8	1	4	185	15	19	219
Missaukee	29	5	3	--	--	--	--	--	--	29	5	3	37
Monroe	398	29	53	4	1	1	28	13	11	430	43	65	538
Montcalm	150	16	20	4	--	3	12	--	2	166	16	25	207
Montmorency	47	3	3	1	--	--	--	--	--	48	3	3	54

TABLE XXI-8. LICENSES ISSUED BY REASON AND CLASS AND BY COUNTY: MAY 1, 1983-APRIL 30, 1984 (cont.)

County	Food service establishments			Mobile establishments			Vending machine locations			Class totals			County total
	Renewal	New owner	New establishment	Renewal	New owner	New establishment	Renewal	New owner	New establishment	Renewal	New owner	New establishment	
Muskegon	471	49	37	11	--	8	143	1	12	625	50	57	732
Newaygo	101	12	8	4	--	2	3	--	--	108	12	10	130
Oakland	2,760	181	243	56	14	34	534	19	110	3,350	214	387	3,951
Oceana	103	4	5	--	--	--	2	--	4	105	4	9	118
Ogemaw	57	2	6	--	--	--	--	--	--	57	2	6	65
Ontonagon	62	2	1	--	--	--	--	--	--	62	2	1	65
Osceola	50	8	3	--	--	1	8	--	5	58	8	9	75
Oscoda	27	7	1	2	--	--	--	--	--	29	7	1	37
Otsego	83	7	7	1	--	--	5	--	1	89	7	8	104
Ottawa	349	19	50	5	--	6	95	14	25	449	33	81	563
Presque Isle	59	1	6	--	--	--	--	--	--	59	1	6	66
Roscommon	111	13	7	--	--	1	--	--	--	111	13	8	132
Saginaw	649	48	73	11	2	5	81	10	2	741	60	80	881
St. Clair	385	32	27	4	--	--	106	--	7	495	32	34	561
St. Joseph	190	11	12	4	--	1	21	--	2	215	11	15	241
Sanilac	132	11	5	--	--	--	28	--	--	160	11	5	176
Schoolcraft	62	2	6	--	--	1	1	--	--	63	2	7	72
Shiawassee	169	15	5	2	--	2	3	12	--	174	27	7	208
Tuscola	159	6	8	2	2	3	15	--	2	176	8	13	197
Van Buren	188	6	8	3	--	5	21	6	8	212	12	21	245
Washtenaw	698	59	55	4	--	8	115	37	27	817	96	90	1,003
Wayne	5,925	536	370	165	8	75	887	181	156	6,977	725	601	8,303
Wexford	97	3	6	--	--	1	7	9	4	104	12	11	127
TOTAL	26,297	2,096	1,928	458	57	276	3,908	482	958	30,663	2,635	3,162	36,460

SOURCE: Michigan Department of Public Health, Division of Food Service Sanitation, special release.

TABLE XXI-3. ESTIMATED ANNUAL SALES OF RETAIL STORES IN THE DETROIT STANDARD METROPOLITAN STATISTICAL AREA, THE STATE OF MICHIGAN, AND THE UNITED STATES: 1969-1983

(millions of dollars)

	Detroit Standard Metropolitan Statistical Area		Michigan		United States	
Year	Nondurable goods	Total	Nondurable goods	Total	Nondurable goods	Total
1969	5,511	8,158	10,747	16,161	284,722	351,633
1970	5,679	8,095	11,154	16,317	261,239	375,633
1971	5,874	8,829	11,962	18,342	277,036	408,850
1972	6,164	9,159	12,934	19,792	300,642	449,069
1973	6,821	10,159	14,554	22,181	336,626	509,538
1974	7,324	10,461	15,604	22,775	371,571	540,988
1975	7,607	10,981	16,357	23,964	405,180	588,146
1976	8,234	12,444	18,067	27,034	439,570	657,375
1977	n.a.	n.a.	n.a.	29,520	476,528	725,220
1978	12,134	17,139	23,145	34,307	528,370	806,898
1979	13,517	18,966	26,082	37,767	597,236	899,379
1980	14,797	20,026	28,093	38,596	668,384	960,767
1981	15,324	21,006	29,530	40,598	727,849	1,043,524
1982	13,525	19,369	27,738	39,252	750,072	1,074,561
1983	14,481	21,414	29,068	42,658	788,825	1,173,966

SOURCE: U.S. Bureau of the Census, *Revised Monthly Retail Sales and Inventories: January 1974 through December 1983*, Current Business Reports, (Washington, D.C.: 1984), BR-13-835, Tables 1, 5 & 6.

NOTE: Figures are not strictly comparable over time because of changes in the sample of stores used for the estimate and revisions in the estimating procedure itself.

n.a.: not available.

TABLE XXI-9. FOOD SERVICE ESTABLISHMENTS BY TYPE, 1 MAY 1983

County	Bar only	Cafeteria	Fast food	Table service	Church	Commissary	Other	Total
Alcona	7	10	10	30	--	--	3	60
Alger	15	6	10	28	1	--	3	63
Allegan	20	53	98	98	2	6	18	295
Alpena	21	24	31	38	--	--	4	118
Antrim	11	14	12	37	4	2	2	82
Arenac	11	6	8	37	--	--	4	66
Baraga	9	9	4	18	--	--	1	41
Barry	8	18	39	41	8	--	6	120
Bay	75	60	113	146	6	2	7	409
Benzie	9	5	19	32	--	--	1	66
Berrien	44	100	195	244	17	6	12	618
Branch	10	22	31	57	4	2	6	132
Calhoun	60	73	142	173	13	3	14	478
Cass	7	21	43	69	7	1	--	148
Charlevoix	7	19	21	51	5	--	11	114
Cheboygan	20	17	34	50	--	--	6	127
Chippewa	21	29	46	91	7	1	--	195
Clare	14	8	29	45	1	--	8	105
Clinton	6	32	48	56	7	1	5	155
Crawford	3	6	14	32	--	1	2	58
Delta	36	28	30	73	8	--	4	179
Dickinson	33	21	23	49	--	1	1	128
Eaton	17	57	78	75	19	2	36	284
Emmet	6	16	23	91	8	3	6	153
Genesee	124	230	418	437	68	14	107	1,398

TABLE XXI-9 FOOD SERVICE ESTABLISHMENTS BY TYPE, 1 MAY 1983 (cont.)

County	Bar only	Cafeteria	Fast food	Table service	Church	Commissary	Other	Total
Gladwin	8	7	15	33	1	--	2	66
Gogebic	31	20	14	60	--	1	2	128
Grand Traverse	9	31	79	79	--	6	7	211
Gratiot	13	32	33	45	3	1	8	135
Hillsdale	9	25	28	47	3	--	1	113
Houghton	51	33	21	65	8	--	1	179
Huron	25	29	34	71	14	1	13	187
Ingham	27	155	279	240	33	9	75	818
Ionia	8	33	37	71	5	1	9	164
Iosco	7	13	20	81	3	--	9	133
Iron	27	9	15	34	1	1	2	89
Isabella	5	33	40	54	--	1	11	144
Jackson	27	92	149	195	11	4	19	497
Kalamazoo	27	141	318	233	7	2	2	730
Kalkaska	2	8	7	19	7	--	1	44
Kent	116	134	344	421	12	23	201	1,251
Keweenaw	4	2	5	13	--	--	--	24
Lake	3	7	7	25	--	--	1	43
Lapeer	10	42	62	55	2	1	14	186
Leelanau	5	9	22	36	--	--	3	75
Lenawee	14	65	79	146	6	1	7	318
Livingston	5	42	62	108	4	3	7	231
Luce	6	9	5	18	--	--	3	41
Mackinac	9	17	14	89	2	1	2	134
Macomb	64	288	604	745	54	5	403	2,163

TABLE XXI-9. FOOD SERVICE ESTABLISHMENTS BY TYPE, 1 MAY 1983 (cont.)

County	Bar only	Cafeteria	Fast food	Table service	Church	Commissary	Other	Total
Manistee	10	13	59	40	7	1	2	132
Marquette	43	41	63	100	15	--	13	275
Mason	8	20	61	31	12	3	7	142
Mecosta	9	27	15	68	--	--	5	124
Menominee	26	19	12	47	11	1	1	117
Midland	13	54	47	55	5	2	27	203
Missaukee	5	6	12	14	--	--	--	37
Monroe	30	61	74	173	12	6	124	480
Montcalm	11	36	41	84	9	1	4	186
Montmorency	5	6	7	30	4	--	1	53
Muskegon	74	91	177	186	6	8	15	557
Newaygo	7	27	20	48	6	1	12	121
Oakland	77	533	1,014	1,079	78	11	391	3,183
Oceana	6	17	27	43	11	--	8	112
Ogemaw	7	7	14	33	2	--	2	65
Ontonagon	25	12	6	21	1	--	--	65
Osceola	2	13	6	40	--	--	--	61
Oscoda	4	2	8	21	--	--	--	35
Otsego	9	12	26	40	3	--	7	97
Ottawa	9	91	99	138	26	8	47	418
Presque Isle	17	6	9	26	6	--	2	66
Roscommon	11	12	39	63	5	--	--	130
Saginaw	54	175	155	304	11	2	68	769
St. Clair	46	74	127	157	13	8	19	444
St. Joseph	10	44	45	90	15	1	8	213

TABLE XXI-9. FOOD SERVICE ESTABLISHMENTS BY TYPE, 1 MAY 1983 (cont.)

County	Bar only	Cafeteria	Fast food	Table service	Church	Commissary	Other	Total
Sanilac	10	22	31	77	3	--	5	148
Schoolcraft	9	12	12	31	1	--	5	70
Shiawassee	18	42	40	63	4	--	22	189
Tuscola	15	33	25	85	7	6	2	173
Van Buren	22	27	47	85	9	9	3	202
Washtenaw	20	145	254	256	24	7	106	812
Wayne	482	868	1,848	2,847	167	54	558	6,824
Wexford	5	16	35	46	--	--	4	106
TOTAL	2,205	4,724	8,267	11,502	834	235	2,538	30,305

SOURCE: Michigan Department of Public Health, Division of Food Service Sanitation, special release.

TABLE XXI-10. BRANDED GASOLINE RETAIL OUTLETS IN MICHIGAN 1978-1983

	1978	1979	1980	1981	1982	1983
Amoco Oil Co.[a]	1,531	1,363	1,304	1,249	1,156	1,117
Atlantic Richfield Co.[b]	101	143	133	130	92	24
Autotronic Systems, Inc.	3	--	--	--	--	--
Boron Oil Corp.	(c)	--	--	--	--	--
By-Low Oil Co.	--	--	--	--	--	15
Cel Oil Products Corp.	--	--	--	--	15	--
Champlin Petroleum Co.	--	--	1	2	--	--
Charter Oil Co.	--	--	--	--	2	--
Checker Oil Co.	41	--	--	49	47	49
Cities Service Oil Co.	--	63	65	60	60	103
Clark Oil & Refining Co.[d]	329	328	328	328	--	--
Coen Oil	--	--	--	--	57	--
Conoco, Inc.	--	--	--	--	--	22
Consumers Gasoline Stations	--	--	--	--	17	--
Consumers Petroleum Co.	113	107	--	--	--	--
Continental Oil Co.	9	--	--	--	--	--
Crystal Flash Petroleum Corp.	--	--	--	--	20	16
Don Foster Oil Co.	--	--	--	--	48	41
Dow Foster Oil Co.	51	--	--	--	39	--
Drake's Refinery Stations, Inc.	--	20	15	15	14	12
Engelfield Oil Co.	--	--	--	--	32	--
Fisca Oil Co., Inc.	9	9	9	9	9	9
Getty Refining & Marketing Co.	--	--	--	--	6	6
Gulf Oil Corp.	227	178	314	208	220	(c)
Highway Oil, Inc.	2	--	2	3	3	3
Hudson Oil Co.	(c)	8	8	5	8	--
Kayo Oil Co.	(c)	--	--	--	--	--
Kerr-McGee Corp.	6	6	4	--	--	3
Key Petroleum, Inc.	--	--	--	--	1	--
Koch Refining, Inc.	13	0	--	--	--	--
Land O Lakes	--	--	--	--	--	4
Leonard Refining, Inc. (Total Lenoard, Inc.)	(c)	--	--	--	--	--
Marathon Oil Co.	569	542	437	442	506	553
Martin Oil Marketing Ltd.	28	28	28	20	13	12
McLeicer	47	--	--	--	--	--

TABLE XXI-10. BRANDED GASOLINE RETAIL OUTLETS IN MICHIGAN: 1978-1983 (cont.)

	1978	1979	1980	1981	1982	1983
Meade Corp.[e]	27	--	--	--	--	--
Mico Oil Co., Inc.	--	--	1	1	1	1
Midland Coops., Inc.	11	11	11	12	10	--
Mid-States Petroleum, Inc.	--	--	--	--	45	70
Miller and Holmes, Inc.	--	--	--	--	1	--
The Miller Oil Co.	7	4	2	1	2	--
Mobil Oil Co.	1,019	962	898	863	807	977
Mumford Inc.	--	--	--	--	--	2
Murphy Oil Corp.	55	49	47	44	35	32
Naph Sol Refining Co.	178	150	93	--	--	--
National Convenience Stores	--	--	--	--	--	6
Pennzoil Co.	19	--	--	--	--	--
Osceola Refining Co.	--	--	--	--	--	13
Phillips Petroleum Co.[f]	167	205	160	197	144	142
Pride Brand Services, Inc.	--	7	9	--	5	2
Rock Island Refining Corp.	--	--	--	--	--	81
Shell Oil Co.	382	349	350	315	299	683
Sigmor Oil Co.	--	3	3	3	3	--
South Central Oil Co.	9	8	--	3	3	(c)
Star Oil Co.	--	--	--	--	55	49
Star Service & Petroleum Co.	--	--	--	--	--	(c)
Sun Co.	641	658	--	--	471	399
Sunmark Industries	--	--	--	--	481	--
Texaco, Inc.	557	619	595	374	107	2
Thornton Oil Co.	--	(c)	1	2	2	2
Total Petroleum, Inc.[g]	598	519	--	516	520	416
Tulsa Oil Corp.	59	--	--	--	--	--
Union Oil Co. of CA	639	535	506	512	552	578
United Refining Co.	12	0	--	--	--	--
Warelubco Inc.	--	1	--	--	--	--
Webb Oil Co.	18	21	18	20	18	--
Zephyr, Inc.	--	--	--	--	80	50

SOURCE: National Petroleum News, Factbook Issue, Mid-June issue.

a. Includes Omega Oil Co.
b. Includes Prestige Stations, Inc.
c. Company markets in Michigan, but figures not supplied.
d. Includes Ownes and Bronco.
e. Includes Maverick Oil Co.
f. Includes Pryamid Oil Co., Tallman Oil Co., Metro 66, and Aero Oil Co.
g. Total and Best Division, Total Petroleum.
--: Companies no longer operating branded retail outlets or data not available.

XXII. FINANCE, INSURANCE, AND REAL ESTATE

Information on the number of banking offices in the state and operating statistics of insured banks are available from the Federal Deposit Insurance Corporation. Data on bank activity throughout the state are contained in the publications and releases of the Board of Governors of the Federal Reserve System. The Board of Governors of the Federal Reserve System releases Bank Debits and Deposit Turnover monthly, listing debits for the Federal Reserve districts and the principal cities. Detailed information on bank debits in Michigan also is available in the releases of the Federal Reserve banks of Chicago and Minneapolis.

Total time and demand deposits by counties and states are available in the F.D.I.C. publication Summary of Deposits in All Commercial and Mutual Savings Banks. Information on bank balance sheet items and operations can be obtained in two other F.D.I.C. publications Bank Operating Statistics and Assets and Liabilities - Commercial and Mutual Savings.

Detailed data about the operations of savings and loan associations are presented in the annual Asset and Liability Trends, published by the Federal Home Loan Bank Board. Small loan company and state-chartered credit union operations in Michigan are covered in Analysis and Recapitulation of Reports of Regulatory Loan Licenses and Abstracts of Reports of Credit Unions, respectively, of the Financial Institutions Bureau, Michigan Department of Commerce. Similar data on credit unions chartered by the federal government are given in the Annual Report published by the Bureau of Federal Credit Unions. Information on production credit associations is available in the Annual Report of the U.S. Farm Credit Administration.

The basic source of information about insurance operations in Michigan is the Annual Report of the Michigan Department of Insurance. This includes the home office address and a summary of financial conditions for all companies licensed to do business in Michigan. The annual Life Insurance Fact Book of the Institute of Life Insurance presents data about the amount of insurance in force, benefit payments, premium collections, and so forth, for the United States, as well as a good deal of information on a state basis.

Statistics on the number of certified public accountants and real estate brokers and salesman licensed in each county are tabulated by the Michigan Department of Regulation, which licenses these occupations.

The economic importance of finance, insurance, and real estate in each Michigan county (Table XXII-7) was developed from the personal income accounts that are prepared by the Bureau of Economic Analysis, U.S. Department of Commerce. Personal income statistics are discussed in the introduction to chapter VI.

Data on health insurance are included in chapter III.

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TABLE XXII-1. AVERAGE WAGE AND SALARY EMPLOYMENT AND WEEKLY HOURS AND EARNINGS OF SALES WORKERS IN MICHIGAN AND THE UNITED STATES FINANCE INSURANCE AND REAL ESTATE ESTABLISHMENTS: 1956-1983

	Michigan[a]	United States			
	Employment	Employment	Weekly		Hourly
Year	(000)	(000)	Hours	Earnings	earnings
1956	75.9	2,389	36.9	65.68	1.78
1957	78.0	2,438	36.7	67.53	1.84
1958	78.6	2,481	37.1	70.12	1.89
1959	80.4	2,549	37.3	72.74	1.95
1960	82.8	2,629	37.2	75.14	2.02
1961	84.9	2,688	36.9	77.12	2.09
1962	86.3	2,754	37.3	80.94	2.17
1963	88.2	2,830	37.5	84.38	2.25
1964	90.5	3,911	37.3	85.79	2.30
1965	94.0	2,977	37.2	88.91	2.39
1966	99.8	3,058	37.3	92.13	2.47
1967	105.0	3,185	37.1	95.72	2.58
1968	109.6	3,337	37.0	101.75	2.75
1969	115.5	3,512	37.1	108.70	2.93
1970	119.7	3,645	36.7	112.67	3.07
1971	121.0	3,772	36.6	117.85	3.22
1972	127.7	3,908	36.6	122.98	3.36
1973	130.3	4,046	36.6	129.20	3.53
1974	134.2	4,148	36.5	137.61	3.77
1975	134.0	4,165	36.5	148.19	4.06
1976	136.9	4,271	36.4	155.43	4.27
1977	142.2	4,467	36.4	165.26	4.54
1978	147.4	4,724	36.4	178.00	4.89
1979	154.5	4,975	36.2	190.77	5.27
1980	156.5	5,160	36.2	209.60	5.79
1981	154.0	5,298	36.3	229.05	6.31
1982	151.9	5,340	36.2	245.44	6.78
1983	151.2	5,454	36.2	264.26	7.30

SOURCE: Michigan Employment Security Commission Special release, and Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C.: Monthly), March 1984, Tables B-1 and C-1.

a. Hours and earnings data are not available for Michigan.

TABLE XXII-2. NUMBER OF BANKS, SAVINGS AND LOAN AND CREDIT UNION OFFICES AND BRANCHES IN MICHIGAN, YEAR END: 1970-1983

	Commercial banks				Savings and loan		Credit unions [b]		
Year	State banks	State banks' branches	National banks	National banks' branches	Number of associations	Total offices [a]	State chartered	Federally chartered	Total
1970	230	649	103	n.a.	68	248	787	372	1,159
1971	227	667	104	n.a.	65	390	754	364	1,118
1972	226	707	106	n.a.	65	307	724	368	1,092
1973	229	742	111	n.a.	65	326	706	363	1,069
1974	230	790	117	n.a.	66	360	679	365	1,044
1975	231	822	120	n.a.	67	400	656	367	1,023
1976	238	847	122	n.a.	66	434	630	358	988
1977	239	875	123	764	66	478	611	352	963
1978	240	929	125	815	65	526	597	350	937
1979	247	1,028	123	907	65	563	584	345	929
1980	250	1,095	126	971	63	608	572	340	924
1981	250	1,138	126	997	59	636	560	309	869
1982	251	1,156	125	1,009	53	635	531	292	823
1983	248	1,140	124	981	52	651	516	278	794

SOURCE: Michigan Department of Commerce, Financial Institutions Bureau, special release.

a. Main offices plus branches.
b. Branch office data are not available.

n.a.: Not available.

TABLE XXII-3. YEAR-END ASSETS OF COMMERCIAL BANKS, SAVINGS AND LOAN ASSOCIATIONS, AND CREDIT UNIONS IN MICHIGAN: 1962-1982

(In millions of dollars)

Year	Commercial banks[a]	Savings & loan associations	Credit unions[b]
1962	11,490	2,356	622
1963	12,358	2,705	709
1964	13,915	3,093	831
1965	15,457	3,341	954
1966	16,977	3,424	1,053
1967	19,108	3,719	1,164
1968	21,190	3,979	1,306
1969	22,684	4,288	1,457
1970	25,133	4,830	1,605
1971	27,393	5,760	1,815
1972	30,024	6,842	2,047
1973	33,223	7,692	2,227
1974	34,611	8,478	2,388
1975	35,938	9,753	2,698
1976	38,091	11,365	2,929
1977	43,189	13,257	3,491
1978	48,165	15,255	3,971
1979	50,218	16,925	4,150
1980	53,392	18,426	4,043
1981	56,504	18,556	2,594
1982	58,987	20,064	2,932

SOURCE: Michigan Department of Commerce, Financial Institutions Bureau, special release.

a. Insured and uninsured
b. State and Federal chartered

TABLE XXII-4. ASSETS OF COMMERCIAL BANKS IN MICHIGAN INSURED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION: 31 DECEMBER 1979, 1980, 1981 AND 1982

(In thousands of dollars)

Assets	1979	1980	1981	1982
	Michigan chartered			
Cash and due from depository institutions	$ 2,185,020	$ 2,993,016	$ 4,258,745	$ 5,660,692
U.S. Treasury securities	1,872,223	2,289,004	2,012,121	1,887,598
Obligations of other U.S. Gov't. agencies & corps.	790,022	975,366	1,209,436	1,475,435
Obligations of States & political subdivisions in U.S.	2,996,337	2,919,810	2,659,394	2,574,887
All other securities	160,112	199,221	206,328	274,660
Federal funds sold & securities purchased under agreements to resell	545,157	709,861	859,297	1,097,821
Loans, Total (excluding unearned income)	13,322,186	13,199,995	13,355,796	13,466,081
Less: Allowance for possible loan losses	123,854	125,737	137,503	142,432
Loans, Net	13,198,332	13,074,258	13,218,293	13,323,649
Lease financing receivables	35,158	37,438	33,434	30,762
Bank premises, furniture & fixtures & other assets representing bank premises	379,231	423,558	444,928	460,304
Real estate owned other than bank premises	22,677	27,004	40,889	71,826
All other assets	328,756	392,236	613,637	648,036
TOTAL ASSETS	$22,513,025	$24,040,772	$25,556,502	$27,505,670

TABLE XXII-4. ASSETS OF COMMERCIAL BANKS IN MICHIGAN INSURED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION: 31 DECEMBER 1979, 1980, 1981 AND 1982 (cont.)

(In thousands of dollars)

Assets	1979	1980	1981	1982
National chartered				
Cash and due from depository institutions	$ 3,933,563	$ 4,544,432	$ 5,702,122	$ 6,041,581
U.S. Treasury securities	1,759,427	2,107,161	1,680,413	1,655,814
Obligations of other U.S. Gov't. agencies & corps.	555,597	660,014	837,457	1,196,717
Obligations of States & political subdivisions in U.S.	3,133,232	3,206,468	2,828,119	2,456,275
All other securities	204,969	306,286	209,710	256,193
Federal funds sold & securities purchased under agreements to resell	1,199,393	635,903	1,426,437	1,303,660
Loans, Total (Excluding unearned income)	15,688,182	16,417,203	16,514,877	16,929,505
Less: Allowance for possible loan losses	145,980	155,625	161,096	182,351
Loans, Net	15,542,202	16,261,578	16,353,781	16,747,154
Lease financing receivables	137,661	209,559	259,656	244,217
Bank premises, furniture & fixtures & other assets representing bank premises	445,606	476,154	468,855	462,336
Real estate owned other than bank premises	35,665	33,622	50,215	84,159
All other assets	757,334	909,696	1,130,732	1,033,308
TOTAL ASSETS	$27,704,649	$29,350,873	$30,947,497	$31,481,414

SOURCE: Michigan Department of Commerce, Financial Institutions Bureau, Annual Report, Calendar Year 1982 (Lansing, Michigan).

TABLE XXII-5. LIABILITIES AND EQUITY CAPITAL OF ALL COMMERCIAL BANKS IN MICHIGAN: 31 DECEMBER 1979, 1980, 1981, AND 1982

(In thousands of dollars)

Liabilities and equity capital	1979	1980	1981	1982
	Michigan chartered			
LIABILITIES				
Demand deposits of individuals, partnerships and corporations	$ 3,754,645	$ 3,645,663	$ 3,410,619	$ 3,194,236
Time & savings deposits of individuals, partnerships and corporations	12,978,004	14,523,469	16,275,885	18,135,908
Deposits of United States government	20,936	21,550	20,537	29,886
Deposits of States and political subdivisions in the United States	1,804,966[a]	1,624,418[a]	1,676,258	1,804,714
All other deposits	175,397	160,203	242,507	329,329
Certified and officers' checks	240,310	235,108	239,243	232,506
TOTAL DEPOSITS	18,974,258	20,210,491	21,865,049	23,726,579
Federal funds purchased and securities sold under agreements to repurchase	1,236,120	1,479,219	1,066,893	1,072,860
Interest bearing demand notes (note balances) issued to U.S. Treasury & other liabilities for borrowed money	252,325	205,551	236,731	252,599
Mortgage indebtedness and liability for capitalized leases	20,305	20,733	22,109	22,927
All other liabilities	377,447	379,638	572,631	551,202
TOTAL LIABILITIES	$20,860,455	$22,295,632	$23,763,413	$25,626,167
Subordinated notes and debentures	$ 102,617	$ 98,415	$ 93,934	$ 81,546

TABLE XXII-5. LIABILITIES AND EQUITY CAPITAL OF ALL COMMERCIAL BANKS IN MICHIGAN: 31 DECEMBER 1979, 1980, 1981, AND 1982 (cont.)

(In thousands of dollars)

Liabilities and equity capital	1979	1980	1981	1982
EQUITY CAPITAL				
Preferred stock	$ 2,040	$ 1,540	$ 1,540	$ 1,540
Common stock	305,214	332,500	343,048	356,284
Surplus	637,574	654,243	685,004	716,519
Undivided profits & reserve for contingencies & other capital reserves	605,125	658,442	669,563	723,614
TOTAL EQUITY CAPITAL	1,549,953	1,646,725	1,699,155	1,797,957
TOTAL LIABILITIES AND EQUITY CAPITAL	$22,513,025	$24,040,772	$25,556,502	$27,505,670
National chartered				
LIABILITIES				
Demand deposits of individuals, partnerships and corporations	$ 5,257,874	$ 4,888,765	$ 5,114,339	$ 4,177,423
Time & savings deposits of individuals, partnerships and corporations	12,770,932	13,920,456	14,869,068	16,973,845
Deposits of United States government	57,044	43,926	53,514	37,325
Deposits of States and political subdivisions in the United States	2,083,819	1,837,227	1,970,495	1,796,847
All other deposits	1,684,461	1,875,557	1,997,659	1,308,774
Certified and officers' checks	415,483	586,665	225,761	211,151
TOTAL DEPOSITS	$22,269,613	$23,152,596	$24,230,836	$24,505,365

TABLE XXII-5. LIABILITIES AND EQUITY CAPITAL OF ALL COMMERCIAL BANKS IN MICHIGAN: 31 DECEMBER 1979, 1980, 1981, AND 1982 (cont.)

(In thousands of dollars)

Liabilities and equity capital	1979	1980	1981	1982
Federal funds purchased and securities sold under agreements to repurchase	$ 2,131,621	$ 2,821,136	$ 2,984,207	$ 3,292,166
Interest bearing demand notes (note balances) issued to U.S. Treasury and other liabilities for borrowed money	518,245	446,366	565,042	663,236
Mortgage indebtedness and liability for capitalized leases	42,200	42,359	42,722	42,781
All other liabilities	897,179	962,784	1,191,082	994,310
TOTAL LIABILITIES	$25,858,858	$27,425,241	$29,013,889	$29,497,858
Subordinated notes and debentures	$ 106,836	$ 97,407	$ 78,919	$ 69,159
EQUITY CAPITAL				
Preferred stock	$ 0	$ 720	$ 720	$ 720
Common stock	346,626	357,768	360,183	358,943
Surplus	578,558	597,428	590,425	603,213
Undivided profits & reserve for contingencies and other capital reserves	813,771	872,309	903,361	951,521
TOTAL EQUITY CAPITAL	1,738,955	1,828,225	1,854,689	1,914,397
TOTAL LIABILITIES AND EQUITY CAPITAL	$27,704,649	$29,350,873	$30,947,497	$31,481,414

SOURCE: Michigan Department of Commerce, Financial Institutions Bureau, Annual Report, Calendar Year 1982 (Lansing, Michigan).

a. Includes deposits of State money--Michigan.

TABLE XXII-6. NUMBER OF BANKS OPERATING IN AND BANKING OFFICES LOCATED IN MICHIGAN, BY COUNTY: 30 JUNE 1982

County	Banks	Banking offices	County	Banks	Banking offices
Alcona	2	3	Lake	1	2
Alger	3	7	Lapeer	8	22
Allegan	7	24	Leelanu	3	7
Alpena	3	13	Lenawee	13	34
Antrim	7	11	Livingston	9	27
Arenac	4	6	Luce	2	2
Baraga	2	2	Mackinac	3	8
Barry	6	7	Macomb	26	167
Bay	9	46	Manistee	2	11
Benzie	4	5	Marquette	7	25
Berrien	10	58	Mason	4	9
Branch	5	17	Mecosta	4	14
Calhoun	9	38	Menominee	4	10
Cass	5	14	Midland	3	20
Charlevoix	6	11	Missaukee	3	4
Cheboygan	2	10	Monroe	8	32
Chippewa	4	13	Montcalm	9	18
Claire	4	8	Montmorency	2	3
Clinton	5	17	Muskegon	8	35
Crawford	3	6	Newaygo	7	9
Delta	6	15	Oakland	41	301
Dickinson	6	12	Oceana	4	7
Eaton	10	23	Ogemaw	5	7
Emmet	6	17	Ontonagon	3	5
Genesee	11	105	Osceola	6	7
Gladwin	3	7	Oscoda	1	2
Gogebic	4	7	Otsego	2	6
Grand Traverse	5	32	Ottawa	15	54
Gratiot	5	14	Presque Isle	4	4
Hillsdale	6	14	Roscommon	2	7
Houghton	6	14	Saginaw	11	66
Huron	10	20	St. Clair	8	50
Ingham	13	72	St. Joseph	10	27
Ionia	7	17	Sanilac	9	20
Iosco	3	11	Schoolcraft	2	4
Iron	4	8	Shiawassee	7	23
Isabella	7	19	Tuscola	12	21
Jackson	7	48	Van Buren	9	18
Kalamazoo	9	64	Washtenaw	14	75
Kalkaska	3	4	Wayne	29	453
Kent	22	146	Wexford	3	13
Keweenaw	1	1	TOTAL	577	2,615

SOURCE: Michigan Department of Commerce, Financial Institutions Bureau, *Financial Institutions Sorted by County*, June 30, 1982.

TABLE XXII-7. RANKING OF MICHIGAN COUNTIES ACCORDING TO EARNINGS IN FINANCE, INSURANCE, AND REAL ESTATE AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

County	Percentage		County	Percentage	
	1972	1982		1972	1982
Eaton	3.01	9.44	Delta	3.28	3.06
Livingston	6.71	7.37	Ionia	2.50	3.05
Montmorency	3.67	7.12	Branch	2.42	3.04
Lake	3.49	6.80	Mason	2.04	3.02
Calhoun	(D)	6.45	Bay	2.22	2.99
Oakland	4.22	6.44	Otsego	2.09	2.97
Gladwin	6.02	5.68	Oscoda	(D)	2.87
Roscommon	5.80	5.59	Gratiot	2.38	2.84
Missaukee	3.87	5.46	Lapeer	2.58	2.81
Houghton	5.50	5.38	Iosco	2.40	2.75
Grand Traverse	4.09	5.31	Alger	2.49	2.70
Wayne	5.17	5.14	Oceana	2.44	2.68
Barry	(D)	5.02	Antrim	2.62	2.67
Ingham	4.17	4.89	Marquette	2.09	2.67
Kent	4.20	4.66	Isabella	(D)	2.64
Arenac	2.63	4.66	Macomb	1.71	2.57
Iron	3.52	4.47	Schoolcraft	3.13	2.50
Wexford	3.02	4.26	Genesee	2.13	2.48
Chippewa	2.16	3.95	Ottawa	2.04	2.47
Clare	3.80	3.91	Tuscola	1.62	2.40
Emmet	2.66	3.88	Washtenaw	2.07	2.39
Gogebic	2.74	3.84	Muskegon	2.15	2.38
Saginaw	2.83	3.84	Monroe	2.11	2.35
Cheboygan	3.76	3.69	Van Buren	(D)	2.30
Newaygo	2.72	3.65	Montcalm	1.99	2.28
Mecosta	2.84	3.58	Mackinac	1.51	2.21
Menominee	(D)	3.56	Presque Isle	1.53	2.12
Clinton	3.22	3.52	Ogemaw	1.72	2.08
Cass	2.05	3.48	Baraga	1.25	2.07
Crawford	3.16	3.47	St. Joseph	2.27	2.01
Manistee	2.61	3.43	Ontonagon	1.27	2.01
St. Clair	2.97	3.40	Osceola	1.39	1.86
Sanilac	1.96	3.31	Leelanau	(D)	1.61
Berrien	2.54	3.27	Midland	1.28	1.52
Huron	2.22	3.26	Allegan	1.04	1.38
Charlevoix	2.70	3.23	Luce	1.56	1.36
Shiawassee	2.37	3.23	Alcona	(D)	0.83
Jackson	2.54	3.18	Kalkaska	(D)	0.71
Lenawee	1.94	3.15	Alpena	(D)	(D)
Benzie	2.52	3.15	Keweenaw	(D)	(D)
Hillsdale	(D)	3.13			
Kalamazoo	(D)	3.11	Michigan	3.80	4.33
Dickinson	1.86	3.09	United States	5.51	6.16

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XXII-8. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN FINANCE, INSURANCE, AND REAL ESTATE: 1981-1982

	Percentage change			Percentage change	
County	1972-1982	1981-1982	County	1972-1982	1981-1982
Barry	(D)	15	Osceola	186	4
Benzie	162	13	Macomb	195	4
Newaygo	173	11	Saginaw	161	4
Jackson	135	10	Alger	117	4
Allegan	207	9	Livingston	198	3
Isabella	(D)	9	Monroe	162	3
Ingham	180	9	Gogebic	149	3
Oscoda	(D)	9	Tuscola	216	3
Iron	172	8	Crawford	191	2
Kalamazoo	(D)	8	Ogemaw	181	2
Menominee	(D)	8	Calhoun	(D)	2
Van Buren	(D)	8	Ontonagon	120	2
Wexford	278	8	Iosco	110	2
Oceana	146	8	Mason	136	2
Eaton	567	8	Chippewa	155	2
Ottawa	211	7	Lake	177	2
Arenac	292	7	Lapeer	139	2
Midland	202	7	St. Joseph	84	1
Montmorency	198	6	Gladwin	105	1
Grand Traverse	300	6	Branch	162	1
Wayne	64	6	Emmet	218	1
Huron	200	6	Muskegon	123	0
Houghton	122	6	Missaukee	216	0
Roscommon	126	6	Luce	109	-1
Clinton	141	5	Berrien	116	-1
Manistee	166	5	Mackinac	214	-1
Clare	127	5	Shiawassee	145	-1
St. Clair	161	5	Charlevoix	175	-1
Schoolcraft	89	5	Baraga	155	-1
Washtenaw	203	5	Cass	230	-3
Genesee	136	5	Mecosta	185	-4
Kent	168	5	Cheboygan	114	-5
Sanilac	188	5	Otsego	301	-12
Lenawee	166	5	Presque Isle	184	-16
Ionia	154	5	Leelanau	(D)	-16
Gratiot	128	5	Alcona	(D)	-41
Delta	115	5	Alpena	(D)	(D)
Montcalm	161	4	Dickinson	286	(D)
Bay	178	4	Kalkaska	(D)	(D)
Hillsdale	(D)	4	Keweenaw	(D)	(D)
Oakland	289	4			
Antrim	106	4	Michigan	129	5
Marquette	184	4	United States	173	11

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XXII-9. DEPOSITS IN COMMERCIAL BANKS AND BANKING OFFICES IN MICHIGAN, BY TYPE OF DEPOSIT, BY COUNTY: 30 JUNE 1982 (cont.)

County	Number of		Amount of deposits in thousands of dollars				
	Banks	Banking offices	Total deposits[a]	Demand[b]	Savings[b]	Time[b]	Public funds
Sanilac	9	19	219,411	18,040	53,369	129,128	17,643
Schoolcraft	2	4	52,610	4,513	12,588	30,112	5,067
Shiawassee	7	23	285,486	35,912	76,484	150,619	19,684
Tuscola	13	22	247,504	22,837	65,694	137,739	19,887
Van Buren	9	18	222,723	26,210	61,172	105,436	28,525
Washtenaw	13	74	1,034,429	183,672	273,024	449,172	116,670
Wayne	29	429	13,979,001	2,910,348	3,095,456	6,385,433	910,300
Wexford	3	13	171,944	13,336	41,394	102,537	13,587
TOTAL	374	2,501	44,354,993	7,253,213	10,780,215	21,913,951	3,384,141

SOURCE: Federal Deposit Insurance Corporation, Banks and Branches June 30, 1982, Summary of Deposits in all Commercial and Mutual Savings Banks, (Washington, D.C.: annually), Table 8.

a. Includes U.S. government deposits, deposits of foreign governments, certified checks, and other types of deposits not shown separately.
b. Individuals, partnerships, and corporations.

TABLE XXII-9. DEPOSITS IN COMMERCIAL BANKS AND BANKING OFFICES IN MICHIGAN, BY TYPE OF DEPOSIT, BY COUNTY: 30 JUNE 1982

	Number of		Amount of deposits in thousands of dollars				
County	Banks	Banking offices	Total deposits[a]	Demand[b]	Savings[b]	Time[b]	Public funds
Alcona	2	3	$ 27,566	$ 2,546	$ 8,513	$ 14,638	$ 1,740
Alger	3	6	40,231	4,200	10,792	22,437	2,470
Allegan	10	23	233,873	31,413	63,681	119,632	18,083
Alpena	3	13	162,953	16,518	41,861	86,675	16,142
Antrim	7	11	84,081	9,092	21,663	42,655	10,199
Arenac	5	7	73,609	5,904	19,909	43,992	3,229
Baraga	2	2	35,750	4,307	9,384	19,501	2,243
Barry	6	7	95,870	12,057	29,322	41,291	12,463
Bay	10	45	484,155	55,387	144,566	251,792	27,082
Benzie	4	5	57,581	5,401	15,785	32,118	3,743
Berrien	10	55	630,120	101,585	124,554	338,807	60,987
Branch	5	17	172,179	19,582	37,375	89,781	23,778
Calhoun	10	33	505,804	88,843	132,433	225,914	48,478
Cass	6	14	142,286	17,191	32,471	74,061	16,987
Charlevoix	6	12	103,520	11,779	27,193	56,578	7,383
Cheboygan	2	10	100,273	10,422	28,207	55,701	5,237
Chippewa	4	13	136,903	14,926	35,358	73,469	11,674
Clare	4	9	110,134	9,253	29,590	60,081	10,543
Clinton	5	16	167,279	14,374	37,899	83,173	28,293
Crawford	3	6	41,068	5,224	9,916	20,170	5,383
Delta	6	15	204,186	22,470	44,294	109,181	27,579
Dickinson	6	12	127,813	19,621	32,389	68,962	6,071
Eaton	10	23	268,987	34,743	73,087	129,795	29,112
Emmet	6	17	185,604	20,372	40,914	102,582	19,864
Genesee	10	98	2,012,516	225,697	563,163	1,029,907	171,655

TABLE XXII-9. DEPOSITS IN COMMERCIAL BANKS AND BANKING OFFICES IN MICHIGAN, BY TYPE OF DEPOSIT, BY COUNTY: 30 JUNE 1982 (cont.)

County	Number of		Amount of deposits in thousands of dollars				
	Banks	Banking offices	Total deposits[a]	Demand[b]	Savings[b]	Time[b]	Public funds
Gladwin	3	6	66,959	6,696	19,298	36,080	4,376
Gogebic	4	6	120,980	12,010	34,555	67,584	6,091
Grand Traverse	5	29	364,396	54,841	81,448	193,071	29,423
Gratiot	5	14	219,684	23,914	59,370	119,127	14,930
Hillsdale	6	14	185,406	20,871	47,228	103,931	12,085
Houghton	5	13	135,617	16,769	40,341	70,407	7,189
Huron	10	20	266,397	21,228	67,060	159,836	16,910
Ingham	13	65	1,340,187	255,312	301,962	645,157	114,991
Ionia	7	17	178,545	19,511	43,025	99,530	15,095
Iosco	3	11	101,434	11,493	30,226	49,395	9,348
Iron	4	8	81,756	6,044	22,083	46,400	6,774
Isabella	8	19	171,848	28,722	46,574	88,724	6,883
Jackson	7	50	532,372	93,578	144,417	237,376	49,841
Kalamazoo	8	61	748,590	152,815	187,265	362,253	35,676
Kalkaska	3	4	41,039	4,508	9,946	19,712	6,659
Kent	23	144	2,362,258	436,410	506,886	1,146,158	208,124
Keweenaw	1	1	5,917	635	1,599	2,421	1,262
Lake	1	2	14,183	1,829	4,942	4,130	3,156
Lapeer	8	22	232,358	22,171	58,001	123,483	27,180
Leelanau	3	7	52,305	4,896	12,503	28,125	6,748
Lenawee	12	34	436,507	53,285	116,721	223,508	36,209
Livingston	9	28	265,792	36,061	73,435	129,678	23,532
Luce	2	2	25,614	2,641	7,272	11,599	3,963
Mackinac	3	7	45,549	5,562	12,921	22,182	4,507
Macomb	27	153	2,891,799	368,318	797,740	1,514,913	189,283

TABLE XXII-9. DEPOSITS IN COMMERCIAL BANKS AND BANKING OFFICES IN MICHIGAN, BY TYPE OF DEPOSIT, BY COUNTY: 30 JUNE 1982 (cont.)

County	Number of		Amount of deposits in thousands of dollars				
	Banks	Banking offices	Total deposits[a]	Demand[b]	Savings[b]	Time[b]	Public funds
Manistee	2	11	134,512	11,993	45,503	62,672	13,619
Marquette	7	25	305,573	30,380	71,847	165,640	33,352
Mason	4	9	110,545	12,708	26,995	65,751	4,328
Mecosta	4	14	118,390	13,565	28,104	61,634	14,280
Menominee	4	10	112,940	10,996	29,405	62,309	9,642
Midland	5	21	327,167	42,277	71,576	164,741	45,714
Missaukee	3	4	45,008	4,026	11,706	23,779	5,123
Monroe	8	32	435,125	44,438	120,179	213,744	51,701
Montcalm	9	19	195,212	20,816	42,032	115,928	13,695
Montmorency	2	3	46,821	3,359	12,734	27,459	3,031
Muskegon	8	35	567,958	75,128	164,610	295,003	26,592
Newaygo	7	9	119,916	16,786	26,487	63,268	12,623
Oakland	42	274	5,446,438	947,183	1,295,078	2,798,986	357,960
Oceana	4	7	73,217	8,248	18,489	37,578	8,697
Ogemaw	7	8	76,868	8,663	22,381	39,837	5,614
Ontonagon	3	5	42,188	5,349	12,352	20,956	3,260
Osceola	6	7	78,757	6,807	21,069	41,866	8,645
Oscoda	1	2	26,670	2,381	8,397	14,609	1,258
Otsego	2	6	84,270	9,248	22,698	43,744	7,539
Ottawa	14	53	724,308	96,844	169,245	370,733	79,880
Presque Isle	4	4	62,197	5,905	17,599	34,041	3,854
Roscommon	2	7	103,386	8,864	29,524	58,762	5,676
Saginaw	10	61	940,539	125,597	267,935	455,064	77,354
St. Clair	8	38	627,299	70,151	159,636	358,348	33,013
St. Joseph	9	26	244,748	33,606	64,316	129,650	15,675

TABLE XXII-10. NUMBER, ASSETS, FIRST MORTGAGE LOANS, AND SAVINGS CAPITAL EARNINGS OF MICHIGAN INSURED SAVINGS AND LOAN ASSOCIATIONS, 31 DECEMBER: 1957-1982

(In thousands of dollars)

Year	Number of associations	Total assets	Mortgage loans and contracts	Savings capital earnings
1957	74	1,250,075	974,758	1,121,500
1958	73	1,434,317	1,115,464	1,281,532
1959	73	1,643,904	1,292,979	1,456,198
1960	73	1,847,920	1,497,207	1,650,087
1961	73	2,054,557	1,650,398	1,830,714
1962	73	2,356,491	1,893,083	2,100,912
1963	72	2,705,419	2,207,693	2,400,485
1964	72	3,093,414	2,557,042	2,773,569
1965	72	3,340,838	2,845,584	2,944,913
1966	71	3,424,042	2,925,831	2,996,855
1967	71	3,719,205	3,174,279	3,285,199
1968	70	3,979,388	3,417,190	3,508,187
1969	70	4,288,115	3,695,319	3,677,844
1970	68	4,830,457	4,094,409	4,205,130
1971	65	5,769,871	4,989,408	5,012,060
1972	65	6,842,107	5,798,053	6,043,166
1973	65	7,691,953	6,596,649	6,765,835
1974	66	8,478,123	7,224,272	7,334,501
1975	67	9,753,163	8,092,134	8,642,753
1976	66	11,364,523	9,379,124	10,180,818
1977	66	13,263,886	11,052,458	11,768,151
1978	65	15,260,981	12,990,752	13,252,982
1979	65	16,924,215	14,645,621	14,447,034
1980	63	18,430,290	15,437,779	15,936,987
1981	59	18,706,000	15,569,000	15,934,000
1982	53	23,506,000	14,790,000	18,620,000

SOURCE: Federal Home Loan Bank Board, Trends in the Savings and Loan Field, 1957 through 1970 (name was changed in 1971); Asset and Liability Trends, 1971 through 1978 (Washington, D.C.: annually); Federal Home Loan Bank Board, Savings & Home Financing Source Book, (Washington, D.C.: annually), Table 8.

TABLE XXII-11. TOTAL ASSETS OF SAVING AND LOAN ASSOCIATIONS IN MICHIGAN, BY COUNTY: 31 DECEMBER 1980, 1981, AND 1982

County and association[a]	Total assets 1980	Total assets 1981	Total assets 1982
Alpena			
First Federal S&L, Alpena	$ 49,360,292	$ 52,517,738	$ 53,448,816
Barry			
Hastings S&L, Hastings	30,696,839	31,390,835	30,847,708
Bay			
Mutual S&L, Bay City	451,381,396	452,469,426	488,281,368
Berrien			
LaSalle Federal S&L, Buchanan	96,021,472	95,596,131	94,447,910
New Buffalo S&L, New Buffalo	27,334,848	29,726,740	30,490,392
People Savings Assn., St. Joseph	121,391,925	121,092,513	123,119,299
S. Joseph S&L, St. Joseph	118,107,185	118,094,835	115,459,184
Branch			
Branch County Federal S&L, Coldwater	61,142,891	61,507,626	62,207902
Calhoun			
Homestead S&L, Albion	20,459,094	20,967,777	22,960,729
Marshall S&L, Marshall	21,315,172	21,678,032	22,130,943
Peoples S&L, Battle Creek	98,367,094	97,540,730	96,631,454
Cass			
First Savings Assn., Dowagiac	60,105,521	b	b
Eaton			
Eaton Federal S&L, Charlotte	67,934,275	70,080,425	70,263,207
Genesee			
First Federal S&L, Flint	214,872,296	c	c
Grand Traverse			
Northwestern S&L, Traverse City	75,224,766	76,653,584	77,676,365
Houghton			
Detroit & Northern S&L, Hancock	912,121,210	917,776,000	1,214,92,216
Ingham			
Capitol S&L, Lansing	489,532,926	479,492,746	468,542,828
First State Savings Assn., East Lansing	67,278,224	d	d
Union S&L, Lansing	120,697,927	117,425,066	117,621,908
Ionia			
Belding S&L, Belding	12,449,329	e	e
Iron			
Iron S&L, Iron River	6,263,206	6,463,575	6,709,792
Jackson			
First Federal S&L, Jackson	107,954,006	106,363,574	105,173,066
Security S&L, Jackson	147,703,961	148,521,898	169,960,506
Kalamazoo			
Fidelity Federal S&L, Kalamazoo	161,904,404	166,676,251	165,503,385
First Federal S&L, Kalamazoo	329,121,385	340,289,702	340,846,742

TABLE XXII-11. TOTAL ASSETS OF SAVING AND LOAN ASSOCIATIONS IN MICHIGAN, BY COUNTY: 31 DECEMBER 1980, 1981, AND 1982 (cont.)

County and association[a]	Total assets 1980	1981	1982
Kent			
Grand Rapids Mutual Federal S&L, Grand Rapids	$187,965,573	$183,828,252	$181,391,379
Kentwood S&L, Kentwood	43,926,971	d	d
Mutual Home Federal S&L, Grand Rapids	318,424,336	316,574,401	318,453,970
West Side Federal S&L, Grand Rapids	64,330,155	61,826,406	60,557,553
Lenawee			
First Federal S&L, Adrian	156,[illegible]1,719	156,127,047	159,510,388
Livingston			
First Federal S&L, Howell	146,975,081	135,529,494	130,310,017
Macomb			
Macomb S&L, St. Clair Shores	16,706,385	18,172,602	18,413,666
Central State S&L	6,552,148	9,466,633	36,438,059
Mason			
Ludington Federal S&L, Ludington	29,247,612	29,480,617	29,377,112
Midland			
Wolverine Federal S&L, Midland	67,245,821	67,616,960	69,468,824
Monroe			
Peoples Savings Bank, Monroe	272,051,214	282,136,379	290,472,263
Muskegon			
Muskegon Federal S&L, Muskegon	227,041,521	233,892,955	238,782,151
Oakland			
American Federal S&L, Southfield	865,763,274	867,408,926	f
Bloomfield S&L Association	--	--	2,854,537
Empire of America, FSA, Southfield	--	--	5,868,125,000
First Federal Savings Bank & Trust Pontiac	626,984,998	751,787,660	775,806,231
Metropolitan Savings Assn., Farmington	412,931,360	424,227,116	395,920,897
Standard Federal S&L, Troy	3,317,190,580	3,474,520,821	3,775,707,071
Surety Federal S&L, Southfield	145,452,184	g	g
Ottawa			
Ottawa S&L, Holland	161,381,682	164,152,767	170,275,593
Saginaw			
Family Federal S&L, Saginaw	383,596,428	420,375,021	401,198,255
First S&L, Saginaw/United Federal S&L Assn.	622,207,205	605,578,430	h
Landmark S&L, Saginaw	50,921,905	b	b
St. Clair			
Citizens Federal S&L, Port Huron	201,543,407	201,835,794	210,859,923
St. Joseph			
Sturgis S&L, Sturgis	48,588,717	47,658,028	44,490,103
Three Rivers S&L, Three Rivers	68,167,986	65,916,776	67,299,667

TABLE XXII-11. TOTAL ASSETS OF SAVING AND LOAN ASSOCIATIONS IN MICHIGAN, BY COUNTY: 31 DECEMBER 1980, 1981, AND 1982 (cont.)

County and association[a]	Total assets 1980	1981	1982
Washtenaw			
Great Lakes Federal S&L, Ann Arbor[b]	$825,763,597	$899,933,324	$1,553,204,559
First Savings Assn., Ypsilanti	20,886,551	22,072,339	22,463,980
USM S&L Association, Ann Arbor	60,631,356	60,965,867	59,314,862
Wayne			
Colonial Federal S&L, Grosse Pte. Woods	208,251,461	208,357,950	194,352,749
Dearborn Federal S&L, Dearborn	142,454,833	140,013,885	134,220,911
Detroit Federal S&L, Detroit	109,744,942	109,113,325	128,830,371
Down River Federal S&L, Taylor	362,633,313	380,452,348	404,052,143
First Dearborn, F.A.,Dearborn	198,076,131	235,901,889	239,121,051
First Federal of MI, Detroit	3,687,233,719	3,953,244,262	5,228,907,139
Guaranty Federal S&L, Wyandotte	148,908,790	143,621,520	140,075,192
Home Federal S&L, Detroit	22,739,494	21,664,461	21,504,779
Peoples Federal S&L, Detroit	175,069,775	b	b

SOURCE: Roster of Members, Federal Home Loan Bank of Indianapolis, (Indianapolis: annually).

NOTE: S&L stands for savings and loan.

a. There are no savings and loan associations headquartered in counties not listed, although there may be branch offices of Michigan's 65 savings and loan associations in these counties.
b. Merged with Standard Federal S&L, Troy.
c. Merged with Family Federal S&L, Saginaw.
d. Merged with First Federal of Michigan, Detroit.
e. Merged with Mutual Home Federal S&L, Grand Rapids.
f. Acquired by Empire of America, FSA.
g. Merged with First Federal Savings Bank and Trust, Pontiac.
h. Merged with Great Lakes Federal S&L, Ann Arbor.

TABLE XXII-12. MORTGAGE LOANS MADE BY INSURED SAVINGS AND LOAN ASSOCIATIONS IN MICHIGAN: 1968-1982

(In thousands of dollars)

Year	Home construction	Home purchase	Other purposes: Construction and purchase of other real property	Other purposes: Refinancing and all other	Total loans closed
1968	115,835	345,650	46,189	85,213	592,886
1969	113,206	337,682	60,902	80,226	592,016
1970	97,045	362,068	104,978	83,050	647,140
1971	198,218	689,750	137,024	201,379	1,226,371
1972	232,521	825,513	175,907	240,319	1,474,260
1973	281,041	824,915	142,900	170,910	1,419,766
1974	166,197	681,288	129,048	161,327	1,137,860
1975	174,355	924,529	127,557	200,978	1,427,418
1976	257,075	1,381,946	145,396	269,399	2,053,816
1977	392,000	1,997,000	75,000	357,000	2,821,000
1978	471,000	2,341,000	69,000	356,000	3,237,000
1979	459,000	2,081,000	43,000	298,000	2,881,000
1980	228,000	1,079,000	80,000	253,000	1,579,000
1981	104,000	512,000	23,000	162,000	803,000
1982	46,000	302,000	46,000	113,000	506,000

SOURCE: Federal Home Loan Bank Board, Savings and Home Financing Source Book, 1968 through 1982 (Washington, D.C.: annually).

TABLE XXII-13. NUMBER OF INSURED SAVINGS AND LOAN ASSOCIATIONS LOCATED AND OPERATING IN MICHIGAN, BY COUNTY: 30 SEPTEMBER 1983

County	Associations	Offices	County	Associations	Offices
Alcona	0	0	Lake	0	0
Alger	0	0	Lapeer	3	4
Allegan	5	6	Leelanau	0	0
Alpena	2	3	Lenawee	2	8
Antrim	0	0	Livingston	3	8
Arenac	1	1	Luce	0	0
Baraga	0	0	Mackinac	0	0
Barry	4	4	Macomb	10	47
Bay	3	11	Manistee	1	1
Benzie	0	0	Marquette	1	2
Berrien	5	22	Mason	2	2
Branch	2	4	Mecosta	1	2
Calhoun	5	14	Menominee	1	1
Cass	2	4	Midland	3	7
Charlevoix	2	2	Missaukee	0	0
Cheboygan	1	1	Monroe	3	10
Chippewa	1	1	Montcalm	1	1
Clare	2	2	Montmorency	0	0
Clinton	2	3	Muskegon	4	9
Crawford	1	1	Newaygo	1	1
Delta	1	1	Oakland	7	82
Dickinson	1	1	Oceana	1	1
Eaton	6	11	Ogemaw	1	1
Emmet	2	2	Ontonagon	0	0
Genesee	2	19	Osceola	1	1
Gladwin	1	2	Oscoda	1	1
Gogebic	1	1	Otsego	1	2
Grand Traverse	2	3	Ottawa	5	12
Gratiot	2	3	Presque Isle	1	1
Hillsdale	2	3	Roscommon	1	1
Houghton	1	2	Saginaw	6	21
Huron	2	4	St. Clair	2	10
Ingham	4	16	St. Joseph	5	8
Ionia	3	4	Sanilac	2	3
Iosco	2	2	Schoolcraft	0	0
Iron	1	1	Shiawassee	2	5
Isabella	2	2	Tuscola	3	3
Jackson	4	12	Van Buren	7	8
Kalamazoo	6	23	Washtenaw	6	21
Kalkaska	1	1	Wayne	14	120
Kent	6	32	Wexford	2	2
Keweenaw	0	0			

SOURCES: Federal Home Loan Bank Board, FSLIC Savings and Loan Associations, September 30, 1983, Summary of Savings Accounts by Geographic Area (Washington D.C.: 1984), Table 5.

TABLE XXII-14. STATE AND FEDERALLY CHARTERED CREDIT UNIONS IN MICHIGAN: 31 DECEMBER 1968-1982

Year	Number	Membership[a]	Loans to members[a]	Assets
			(In thousand of dollars)	
		State		
1968	818	1,030,784	694,117	858,573
1969	810	1,112,939	777,181	973,330
1970	787	1,175,788	814,870	1,096,997
1971	754	1,199,578	837,039	1,248,321
1972	724	1,249,293	913,465	1,402,713
1973	706	1,303,827	1,014,893	1,501,612
1974	679	1,309,000	1,059,746	1,603,246
1975	656	1,374,000	1,179,342	1,820,193
1976	630	1,417,587	1,338,991	1,910,592
1977	611	1,498,260	1,744,297	2,297,283
1978	598	1,587,781	1,994,985	2,600,450
1979	584	1,631,809	1,963,821	2,712,000
1980	572	1,664,065	1,785,952	2,648,387
1981	559	1,721,655	1,842,651	3,002,950
1982	530	1,731,047	1,833,800	3,482,804
		Federal		
1968	366	581,189	366,425	447,004
1969	371	610,448	408,478	483,522
1970	372	631,940	415,800	507,796
1971	364	654,871	461,374	567,274
1972	368	690,887	520,926	644,033
1973	363	737,751	591,280	724,900
1974	365	779,534	632,718	784,452
1975	367	809,200	710,035	877,520
1976	358	874,040	861,099	1,018,098
1977	352	962,801	1,045,652	1,193,701
1978	350	1,099,838	1,216,740	1,371,054
1979	345	1,195,568	1,211,426	1,437,921
1980	331	921,310	1,058,326	1,545,872
1981	303	1,251,615	1,066,466	1,557,838
1982	284	1,263,502	1,023,642	1,715,773

SOURCE: National Credit Union Administration, Annual Report, (Washington, D.C.: annually), Michigan Department of Commerce, Financial Institutions Bureau, Abstracts of Reports of Credit Unions, 1967 through 1976; and Michigan Department of Commerce, Financial Institutions Bureau, Annual Report, 1977 through 1982 (Lansing: annually).

a. Excludes Central Credit Union of Michigan.

TABLE XXII-15. NUMBER, LOANS OUTSTANDING, AND AVERAGE INVESTED ASSETS OF MICHIGAN SMALL LOAN COMPANIES: 1960-1982

Year	Number of licensees	Loans outstanding 31 December	Average invested assets
		(In thousands of dollars)	
1960	548	$177,036	$187,369
1961	584	177,369	188,741
1962	603	181,240	186,000
1963	608	248,081	205,070
1964	634	281,583	271,983
1965	655	304,700	301,897
1966	675	323,872	323,615
1967	677	334,674	338,073
1968	691	345,413	347,609
1969	676	357,969	362,409
1970	626	346,625	365,306
1971	595	332,115	381,379
1972	597	395,160	397,046
1973	593	412,348	433,592
1974	550	391,783	445,643
1975	461	349,687	406,339
1976	415	326,921	356,701
1977	387	332,526	351,956
1978	375	341,166	358,333
1979	350	422,111	401,148
1980	271	342,213	402,574
1981	165	231,386	303,003
1982	104	138,111	195,952

SOURCE: Michigan Department of Commerce, Financial Institutions Bureau, Analysis and Recapitulation of Reports of Regulatory Loan Licensees, 1974 and 1978 (Lansing: annually), p. 5 (1978); Michigan Department of Commerce, Financial Institutions Bureau, Annual Report 1982, p. 85.

TABLE XXII-16. CONSOLIDATED BALANCE SHEET OF MICHIGAN SMALL LOAN COMPANIES: 31 DECEMBER 1980-1982

(In thousands of dollars)

ASSETS	1980	1981	1982
Cash on hand and in bank	1,351	1,025	721
Loans receivable (net of reserve for bad debts)	342,213	231,386	138,111
Real estate (less depreciation)	314	265	244
Furniture, fixtures, and equipment (less depreciation)	1,267	834	444
Deferred charges and prepaid expenses	1,023	624	98
Other assets	1,059	979	991
Total assets used in the Regulatory Loan Business	347,227	235,113	140,609
Other assets not used in the Regulatory Loan Business	72,960	67,890	55,343
TOTAL ASSETS	420,187	303,003	195,952
LIABILITIES AND CAPITAL			
Accounts and notes payable:			
Banks	8,434	5,526	5,387
Due to parent company of affiliate	244,141	160,479	63,413
Other short-term notes and accounts	15,673	12,589	10,060
Bonds and long-term notes	8,563	6,999	6,777
Other liabilities:			
Accrued expenses	536	482	1,585
Dealer reserves	1,552	1,375	1,262
Other	181	205	4,791
Expense reserves:			
Reserves for licenses and taxes	108	(448)	(147)
Other expense reserves	160	106	79
Reserve for bad debts	8,370	6,502	4,909
Branch office capital	106,810	92,266	85,215
Net worth	218	239	198
Capital stock:			
Preferred	1,131	915	915
Common	2,807	2,156	1,890
Appropriated surplus or capital reserves	11,855	10,629	2,760
Earned surplus (including undivided profits)	9,648	2,983	6,858
TOTAL LIABILITIES AND CAPITAL	420,187	303,003	195,952

SOURCE: Michigan Department of Commerce, Financial Institutions Bureau, Annual Report, 1982 (Lansing: annually).

TABLE XXII-17. LIFE INSURANCE IN FORCE IN MICHIGAN AND THE UNITED STATES: 1969-1982

(In millions of dollars)

Year	Ordinary	Group	Industrial	Credit	Total
			Michigan		
1968	25,177	25,895	1,377	4,060	56,509
1969	27,097	27,936	1,353	4,415	60,801
1970	28,846	31,076	1,321	4,510	65,753
1971	31,012	34,615	1,340	5,131	72,098
1972	33,314	37,602	1,340	5,847	78,103
1973	35,867	43,569	1,318	5,460	86,214
1974	38,188	49,309	1,287	5,306	94,090
1975	40,093	55,184	1,265	5,494	102,036
1976	43,323	61,538	1,218	5,765	111,844
1977	46,995	67,763	1,187	6,031	121,976
1978	51,528	77,264	1,170	7,375	137,337
1979	56,488	89,358	1,187	7,689	154,722
1980	60,406	95,268	1,169	6,477	163,320
1981	65,020	103,999	1,110	6,744	176,873
1982	70,677	109,778	1,036	6,188	187,679
			United States		
1968	633,392	442,778	38,827	68,357	1,183,354
1969	682,453	488,864	38,614	74,598	1,284,529
1970	734,730	551,357	38,644	77,392	1,402,123
1971	792,318	589,883	39,202	81,931	1,503,334
1972	853,911	640,689	39,975	93,410	1,627,985
1973	928,192	708,322	40,632	101,154	1,778,300
1974	1,009,038	827,018	39,441	109,623	1,985,120
1975	1,083,421	904,695	39,423	112,032	2,139,571
1976	1,177,672	1,002,647	39,175	123,569	2,343,063
1977	1,289,321	1,115,047	39,045	139,402	2,582,815
1978	1,425,095	1,243,994	38,080	163,081	2,870,250
1979	1,585,878	1,419,418	37,794	179,250	3,222,340
1980	1,760,474	1,579,355	35,994	165,215	3,541,038
1981	1,978,080	1,888,612	34,547	162,356	4,063,595
1982	2,216,388	2,066,361	32,766	161,144	4,476,659

SOURCE: American Council of Life Insurance, Life Insurance Fact Book, (New York, N.Y.: annually).

TABLE XXII-18. PAYMENTS TO LIFE INSURANCE BENEFICIARIES IN MICHIGAN AND THE UNITED STATES: 1973-1982

	Ordinary		Group		Industrial		Total	
Year	Number (1,000)	Amount ($1,000)	Number (1,000)	Amount ($1,000)	Number (1,000)	Amount ($1,000)	Number (1,000)	Amount ($1,000)
				Michigan				
1973	41.5	154,800	51.2	233,900	28.8	16,100	121.5	404,800
1974	41.3	158,800	52.9	250,200	27.0	15,600	121.2	424,600
1975	42.0	162,100	51.5	254,600	27.1	15,600	120.6	432,300
1976	41.7	165,900	50.1	265,000	26.1	15,500	117.9	446,400
1977	43.8	179,100	49.2	307,100	28.6	17,100	121.6	503,300
1978	43.1	190,600	50.2	324,700	26.6	16,600	119.9	531,900
1979	42.3	196,500	48.9	333,800	24.9	15,900	116.1	546,200
1980	42.3	202,700	48.6	370,800	25.4	16,500	116.3	590,000
1981	43.1	218,400	48.6	373,800	23.2	16,300	114.9	608,500
1982	44.1	225,600	47.3	405,000	24.4	17,000	115.8	647,600
				United States				
1973	1,112	4,289,400	884	3,805,900	1,018	476,700	3,014	8,572,000
1974	1,097	4,382,000	938	4,031,200	974	471,900	3,009	8,885,100
1975	1,098	4,473,600	906	4,256,000	922	462,500	2,926	9,192,100
1976	1,110	4,665,400	882	4,452,900	933	475,000	2,925	9,593,300
1977	1,098	4,907,500	860	4,812,900	910	475,300	2,869	10,195,700
1978	1,141	5,338,000	892	5,281,900	927	487,800	2,961	11,107,700
1979	1,120	5,576,400	893	5,708,900	881	480,400	2,894	11,765,700
1980	1,184	6,119,800	910	6,271,000	873	493,600	2,967	12,884,400
1981	1,221	6,662,600	981	7,014,400	806	447,000	3,008	14,154,000
1982	1,235	7,015,300	967	7,586,900	771	463,600	2,973	15,065,800

SOURCE: American Council of Life Insurance, Life Insurance Fact Book, (New York, N.Y.: annually).

TABLE XXII-19. ASSETS, CAPITAL, AND SURPLUS OF MICHIGAN INSURANCE COMPANIES: 31 DECEMBER 1980, 1981, AND 1982.

	1980			1981			1982		
Type of company	Number of companies	Admitted assets ($1,000)	Capital and surplus ($1,000)	Number of companies	Admitted assets ($1,000)	Capital and surplus ($1,000)	Number of companies	Admitted assets ($1,000)	Capital and surplus ($1,000)
Property & liability ins.									
Stock	21	1,765,164	614,922	22	1,849,027	612,920	25	1,954,594	714,634
Mutual	28	1,917,401	553,495	28	2,090,274	341,481	27	2,205,185	699,347
Reciprocal exchanges	1	705,881	176,841	1	761,898	177,073	1	798,530	185,640
Farm mutuals	5	2,013	1,814	5	2,286	2,066	5	2,570	2,382
Funds ard pools	3	275,236	54,120	3	248,833	66,459	3	268,531	103,384
Life insurance									
Stock	22	1,612,452	291,703	23	1,990,029	325,079	24	2,107,590	382,548
Mutual	4	491,275	24,101	4	553,803	27,646	4	582,171	29,213
Fraternal benefit societies	3	134,427	26,020	3	145,912	28,708	3	154,271	30,706
Nonprofit medical, hospital, and dental organizations, and associations	4	948,864	254,907	4	865,625	206,017	4	1,008,154	251,309
Health maintenance organizations	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	14	71,430	22,348

SOURCE: Michigan Department of Licensing and Regulation, Insurance Bureau, Annual Statistical Report.

TABLE XXII-20. SUMMARY OF MICHIGAN PREMIUMS AND LOSSES OF COMPANIES AND SOCIETIES OPERATING IN MICHIGAN: 1981 AND 1982

(Thousands of dollars)

Type of company	Total direct Michigan premiums[a]		Total direct Michigan losses[b]	
	1981	1982	1981	1982
Property and liability insurance companies				
Funds and pools, Michigan	68,091	51,081	55,433	41,650
Stock companies, Michigan	558,609	587,571	354,457	401,431
Stock companies, foreign	1,922,526	1,842,998	1,324,023	1,429,443
Mutual companies, Michigan	587,182	565,321	386,467	445,922
Mutual companies, foreign	567,959	542,653	387,496	400,486
Alien companies-U.S. branches	13,532	11,288	7,438	6,535
Reciprocal exchanges, Michigan	392,400	395,551	403,945	401,599
Reciprocal exchanges, foreign	78,326	80,079	55,517	64,262
TOTAL	4,188,625	4,076,542	2,974,776	3,191,328
Life insurance companies				
Stock companies				
Life insurance operation, Michigan	164,298	208,341	87,062	78,462
Life insurance operation, foreign	686,619	999,282	476,661	546,390
Casualty operations, Michigan	79,074	77,117	69,926	61,363
Casualty operations, foreign	632,537	576,640	531,273	440,602
Mutual companies				
Life insurance operations, Michigan	22,871	30,698	14,742	19,268
Life insurance operations, foreign	973,087	985,019	803,052	952,521
Casualty operations, Michigan	67,052	94,051	60,773	84,320
Casualty operations, foreign	417,902	369,551	390,748	317,904
Alien companies-U.S. branches				
Life insurance operations	105,540	118,631	78,938	89,514
Casualty operations	43,044	37,351	36,773	31,852
Fraternal benefit societies				
Life insurance operations, Michigan	3,662	8,116	1,054	3,080
Life insurance operations, foreign	45,632	56,169	11,565	25,486
Casualty operations, Michigan	60	41	12	16
Casualty operations, foreign	2,887	3,233	1,593	21,041
Nonprofit associations				
Life insurance operations	38	35	9	38
Casualty (excluding Blue Cross)	147,532	236,156	84,717	177,445
Blue Cross-Blue Shield of Michigan	2,640,044	2,936,199	2,579,967	2,767,622
TOTAL LIFE INSURANCE OPERATIONS	2,001,747	2,406,291	1,473,083	1,714,759
TOTAL CASUALTY OPERATIONS	4,030,132	4,330,339	3,755,782	3,902,165

SOURCE: Michigan Department of Licensing & Regulation, Insurance Bureau, *Annual Statistical Report 1981 and 1982* (Lansing: 1982 and 1983).

a. Casualty premiums are premiums earned.

b. Property, liability, and casualty losses are losses incurred. Life losses are losses paid.

TABLE XXII-21. RESIDENTIAL AND NONRESIDENTIAL MORTGAGES OWNED BY U.S. LIFE INSURANCE COMPANIES IN MICHIGAN AND THE UNITED STATES: 1968-1982

Year	Farm	Nonfarm F.H.A.	Nonfarm V.A.	Nonfarm conventional	Total
Michigan (In thousands of dollars)					
1968	43,200	436,900	144,000	1,541,700	2,165,800
1969	38,200	427,200	131,500	1,605,200	2,202,100
1970	36,600	407,000	119,700	1,696,800	2,260,100
1971	35,200	369,400	106,700	1,747,200	2,258,500
1972	33,400	331,900	95,600	1,815,500	2,276,400
1973	31,400	298,300	82,900	1,904,000	2,316,600
1974	30,800	227,100	74,600	2,040,700	2,423,200
1975	34,800	254,100	66,500	2,096,900	2,452,300
1976	49,400	228,500	59,500	2,146,800	2,484,200
1977	50,400	204,700	52,000	2,461,300	2,768,400
1978	64,700	192,800	44,800	2,562,700	2,865,000
1979	75,900	152,400	49,000	2,842,000	3,110,300
1980	79,600	141,000	35,800	3,038,800	3,295,000
1981	80,400	131,500	32,000	3,117,300	3,361,200
1982	80,400	n.a.	n.a.	3,221,700	3,302,100
United States (In millions of dollars)					
1968	5,801	12,469	5,954	45,749	69,973
1969	5,773	12,271	5,701	48,282	72,027
1970	5,649	12,001	5,394	51,331	74,375
1971	5,601	11,336	5,004	53,555	75,496
1972	5,678	10,512	4,660	56,098	76,948
1973	5,996	9,740	4,402	61,231	81,369
1974	6,327	9,115	4,178	66,614	86,234
1975	6,753	8,502	3,903	70,009	89,167
1976	7,425	7,838	3,603	72,686	91,552
1977	8,842	7,182	3,348	77,476	96,848
1978	10,499	6,705	3,164	85,799	106,167
1979	12,184	6,372	2,975	96,890	118,421
1980	12,958	6,066	2,781	109,275	131,080
1981	13,100	5,651	2,590	116,406	137,747
1982	12,831	5,309	2,462	121,387	141,989

SOURCE: American Council of Life Insurance, Life Insurance Fact Book, 1968 through 1982 (New York: annually).

n.a.: Data not available.

TABLE XXII-22. NUMBER OF STOCKBROKER AND SECURITIES DEALER FIRMS IN MICHIGAN AND THE UNITED STATES: 30 SEPTEMBER 1968-1982

Year	Michigan				Total U.S.
	Sole proprietorships	Partnerships	Corporations[a]	Total	
1968	16	10	46	72	4,355
1969	15	10	49	74	4,755
1970	17	9	55	81	5,187
1971	9	6	56	71	4,901
1972	8	5	54	67	4,968
1973	8	4	54	66	4,373
1974	8	3	52	63	3,982
1975	8	4	44	56	3,546
1976	5	5	46	56	5,380
1977	6	5	49	60	5,725
1978	6	4	45	55	6,025
1979	5	4	48	57	6,226
1980	8	4	54	66	6,730
1981	7	5	59	71	7,423
1982	7	3	66	76	8,157[b]

SOURCE: Securities and Exchange Commission, Annual Report, 1968 through 1982 (Washington, D.C.: annually).

a. Includes all forms of organizations other than sole proprietorships and partnerships.

b. Includes offices of foreign firms.

TABLE XXII-23. NUMBER OF SHAREHOLDERS OF PUBLIC CORPORATIONS IN MICHIGAN AND THE UNITED STATES, SELECTED YEARS: 1952-1982

(In thousands of persons)

Year	Michigan	United States
1952	n.a.	6,490
1956	370	8,604
1959	625	12,391
1962	794	16,867
1965	946	19,963
1970	1,403	30,612
1975	1,517	25,270
1980	1,349	30,200
1981	1,385	32,260
1982	1,672	42,360

SOURCE: New York Stock Exchange, Fact Book, (New York, N.Y.: annually).

n.a. not available.

TABLE XXII-24. DISTRIBUTION BY NUMBER OF BRANCHES OF FSLIC INSURED SAVINGS AND LOAN INSTITUTIONS IN MICHIGAN, SEPTEMBER 30, 1983

Institutions with:	Number of institutions	Number of offices	Savings in Michigan ($000)	Number of offices with ($000,000) savings accounts				
				$0-$9.9	$10-$24.9	$25-$49.9	$50-$99.9	$100 +
Number of branches								
0	6	6	$ 143,382	1	4	0	1	0
1	4	8	130,888	3	2	3	0	0
2	3	9	117,429	6	1	2	0	0
3-5	14	75	1,497,368	33	24	11	6	1
6-9	9	68	1,336,796	26	26	10	6	0
10 or more	15	464	14,321,843	118	179	96	52	19
TOTAL	51	630	17,547,706	187	236	122	65	20

SOURCE: Federal Home Loan Bank Board, FSLIC Savings and Loan Associations, September 30, 1981, Summary of Savings Accounts by Geographic Area (Washington, D.C.: 1983), Table 3.

XXIII. SELECTED SERVICES

The first postwar business census covered the year 1948. Subsequent censuses have been taken twice each decade, with current law authorizing the U.S. Bureau the Census to canvass of the nation's industrial and business establishments at five-year intervals covering years ending in 2 and 7. These economic censuses cover construction industries, manufacturing, mining, retail trade, selected services, selected transportation, and wholesale trade.

Each establishment is classified on the basis of its major economic activity. Those primarily engaged in furnishing lodging, or lodging and meals, and camping space or camping facilities, on a fee basis; providing services generally involved in the care of the person or apparel, such as laundries, dry cleaning plants, portrait photographic studios, and beauty and barber shops; rendering services to business establishments on a fee or contract basis; furnishing automotive repair, leasing, and parking and other repair services to the general public; producing, distributing, or exhibiting motion pictures in commercially operated theaters; providing other amusement or entertainment on payment of a fee or admission charge; making dentures and artificial teeth to order for the dental profession; offering legal advice or legal services (providing that the head of the organization or office is a member of the bar); or rendering engineering, architectural, and surveying services were classified in the Census of Selected Services Industries, 1977. The tabulations exclude such establishments that are part of a military post, school, university, and so forth. Many service establishments, such as hospitals, physicians' offices, and educational institutions, are not covered in the Census of Selected Services Industries.

Beginning in 1954, the Census of Selected Service Industries has excluded firms with no paid employees during the census year unless they reported sales of $1,000 or more. Firms with no paid employees were not actually canvassed, their sales figures and kind-of-business classification being obtained from 1972 income tax returns.

Several changes were made in the kind-of-business definitions between 1967 and 1972 with the result that comparability between the two censuses is limited. The kinds of business involving the most significant changes are those in the new computer and data processing services category.

It is customary in an economic census to classify each establishment separately, irrespective of whether it is part of a larger organization.

Receipts reported in the Census of Selected Service Industries do not include receipts incidental to other kinds of business, such as wholesaling or services. They do include total receipts, including accruals, of selected service establishments even though some of these receipts were from selling merchandise, carrying charges, delivering merchandise, and so forth. Trade-in allowances are not deducted, but refunds and allowances for merchandise returned are. Sales and excise taxes are included, but nonoperating income (rental or real estate, interest or dividends on investments, and so forth) is not. Receipts include receipts so defined of all establishments with a sales volume of $1,000 or more at any time during the year, whereas the number of establishments in the Census of Retail Trade excludes those that have gone out of business during the year. The census also includes establishments in operation less than the full year, with reported sales of less than $1,000, if they could have expected reaching the $1,000 cutoff on the basis of year-round operation.

Payroll is as defined by the Internal Revenue Service. It includes wages and salaries, gratuities reported to the employer, commissions, bonuses, vacation and sick leave pay before deducting employee income taxes, Social Security taxes, union dues, and so forth. Payments in kind, such as free restaurant meals, are included.

Employment for the pay period including 12 March 1972 consists of paid employees of corporations and unincorporated businesses, including salaried officers and executives of corporations but excluding proprietors and partners of unincorporated businesses. Employees on paid sick leave or holiday or on paid vacation also are included.

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TABLE XXIII-1. AVERAGE WAGE AND SALARY EMPLOYMENT IN MICHIGAN AND THE UNITED STATES SERVICE ESTABLISHMENTS: 1956-1983

Year	Michigan Employment (000)	United States Employment (000)
1956	234.4	6,497
1957	241.2	6,708
1958	244.6	6,765
1959	244.4	7,087
1960	263.7	7,378
1961	270.8	7,620
1962	286.6	7,982
1963	298.2	8,277
1964	310.5	8,660
1965	326.7	9,036
1966	353.0	9,498
1967	376.8	10,045
1968	385.5	10,567
1969	402.9	11,169
1970	407.8	11,548
1971	420.1	11,797
1972	454.6	12,276
1973	489.0	12,857
1974	510.1	13,441
1975	514.4	13,892
1976	541.2	14,551
1977	580.5	15,303
1978	613.9	16,252
1979	626.8	17,112
1980	644.5	17,890
1981	649.6	18,619
1982	650.2	19,064
1983	656.5	19,680

SOURCE: Michigan Employment Security Commission Special release, and Bureau of Labor Statistics, Employment and Earnings, Washington, D.C.: Monthly), March 1984, Table B-1.

TABLE XXIII-3. RANKING OF MICHIGAN COUNTIES ACCORDING TO EARNINGS IN SERVICE INDUSTRY ESTABLISHMENTS AS A PERCENTAGE OF TOTAL LABOR AND PROPRIETORS' EARNINGS: 1982

	Percentage			Percentage	
County	1972	1982	County	1972	1982
Crawford	21.90	38.61	Delta	12.60	13.23
Emmet	26.41	37.32	Newaygo	10.96	13.17
Leelanau	21.11	29.86	Mason	9.55	13.17
Oakland	17.96	25.73	Roscommon	12.90	13.15
Wexford	14.78	22.75	Ottawa	11.69	12.92
Grand Traverse	19.78	22.22	Montcalm	12.43	12.82
Gogebic	14.82	21.60	Oceana	11.88	12.66
Keweenaw	7.36	21.32	Antrim	11.28	12.12
Otsego	16.76	20.98	Genesee	9.67	12.06
Mackinac	21.64	20.16	Sanilac	9.34	12.00
Arenac	12.98	19.81	Monroe	10.85	11.69
Clare	15.56	19.76	Iron	(D)	11.64
Lake	35.06	18.85	Cheboygan	13.65	11.44
Kalamazoo	13.68	18.74	Mecosta	9.00	11.41
Isabella	13.20	18.03	Alpena	10.14	11.37
Kent	14.83	17.77	Cass	7.93	11.33
Wayne	13.34	17.59	Clinton	9.32	11.29
Bay	14.46	17.33	Midland	8.91	11.25
Houghton	14.29	17.17	Dickinson	(D)	10.81
Eaton	11.09	16.92	Van Buren	11.05	10.60
Washtenaw	10.91	16.30	Lapeer	9.46	10.52
Marquette	11.39	16.01	Allegan	9.57	10.47
Muskegon	12.31	16.01	Hillsdale	8.45	10.43
Gladwin	13.61	15.99	Alger	10.12	9.76
Gratiot	12.98	15.89	Tuscola	9.09	9.61
Benzie	16.42	15.64	Montmorency	5.20	9.22
Oscoda	10.39	15.58	Manistee	8.79	9.19
Ingham	12.36	15.45	Ionia	8.81	8.88
Livingston	11.69	15.27	Menominee	9.11	8.25
Lenawee	10.94	14.89	Iosco	6.28	8.23
Berrien	10.56	14.76	St. Joseph	6.62	7.58
Shiawassee	11.54	14.70	Branch	6.64	7.54
Ogemaw	12.14	14.54	Missaukee	9.86	7.41
Charlevoix	15.22	14.29	Luce	(D)	7.40
Chippewa	7.26	14.18	Osceola	6.39	7.08
Calhoun	12.27	14.18	Kalkaska	7.14	6.29
Saginaw	10.84	14.14	Jackson	13.13	(D)
St. Clair	13.09	13.99	Ontonagon	2.29	(D)
Baraga	9.60	13.90	Presque Isle	(D)	(D)
Alcona	10.79	13.85	Schoolcraft	9.97	(D)
Huron	11.06	13.61			
Barry	10.00	13.60	Michigan	12.81	17.08
Macomb	8.98	13.46	United States	15.56	18.71

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XXIII-4. RANKING OF MICHIGAN COUNTIES ACCORDING TO PERCENTAGE CHANGE IN LABOR AND PROPRIETORS' EARNINGS IN SERVICE INDUSTRY ESTABLISHMENTS: 1981-1982

	Percentage change			Percentage change	
County	1972-1982	1981-1982	County	1972-1982	1981-1982
Crawford	367	39	Mason	120	5
Isabella	269	36	Shiawassee	129	5
Wexford	312	31	Iron	(D)	4
Eaton	225	30	Ionia	110	4
Arenac	238	29	St. Joseph	138	4
Lake	-23	24	Hillsdale	146	4
Montmorency	172	20	Roscommon	140	4
Menominee	102	15	Alger	94	4
Otsego	254	14	Livingston	255	4
Clinton	167	12	Genesee	153	3
Muskegon	162	12	Charlevoix	116	3
Kent	189	12	Iosco	141	3
Oscoda	172	11	Macomb	195	3
St. Clair	143	11	Sanilac	120	3
Ottawa	184	10	Alcona	154	3
Midland	221	10	Berrien	135	2
Gladwin	155	10	Oceana	139	2
Allegan	151	9	Calhoun	120	2
Dickinson	(D)	9	Branch	137	2
Kalkaska	432	8	Benzie	99	2
Emmet	208	8	Washtenaw	291	1
Leelanau	164	8	Lenawee	123	0
Newaygo	144	8	Gratiot	134	0
Clare	180	8	Mecosta	186	-1
Kalamazoo	239	7	Manistee	112	-1
Huron	151	7	Chippewa	172	-2
Grand Traverse	246	7	Missaukee	68	-3
Saginaw	151	6	Alpena	108	-5
Oakland	266	6	Van Buren	96	-7
Gogebic	160	6	Antrim	117	-7
Tuscola	125	6	Keweenaw	162	-8
Barry	170	6	Monroe	153	-9
Delta	143	6	Baraga	124	-29
Mackinac	100	5	Jackson	(D)	(D)
Ogemaw	177	5	Luce	(D)	(D)
Ingham	198	5	Marquette	213	(D)
Lapeer	144	5	Ontonagon	(D)	(D)
Wayne	117	5	Osceola	136	(D)
Houghton	173	5	Presque Isle	(D)	(D)
Bay	147	5	Schoolcraft	(D)	(D)
Cass	177	5			
Cheboygan	83	5	Michigan	168	6
Montcalm	135	5	United States	193	9

SOURCE: Bureau of Economic Analysis, Regional Economics Information System.

(D) Witheld to avoid disclosing data for individual companies.

TABLE XXIII-2. SUMMARY STATISTICS FOR SELECTED SERVICE ESTABLISHMENTS IN MICHIGAN AND THE UNITED STATES: 1947, 1954, 1958, 1963, 1967, 1972, AND 1977

		Establishments with payroll				All establishments[a]	
Year		Number	Receipts ($1,000,000)	Annual Payroll ($1,000,000)	Paid employees[b]	Number	Receipts ($1,000,000)
1947[c]	Michigan	n.a.	n.a.	130	48,315	21,376	367
	U.S.	n.a.	n.a.	4,164	2,011,661	665,475	13,296
1954	Michigan	15,127	935	267	76,449	29,699	1,016
	U.S.	375,149	21,263	6,534	2,361,821	785,589	23,508
1958	Michigan	17,653	1,256	338	93,279	38,521	1,380
	U.S.	442,584	29,001	9,006	2,889,183	975,250	32,376
1963	Michigan	20,188	1,642	424	114,614	44,412	1,793
	U.S.	504,356	41,023	12,192	3,261,514	1,061,673	44,586
1967	Michigan	19,654	2,214	647	139,436	43,214	2,397
	U.S.	521,416	55,527	17,524	3,841,174	1,187,814	60,542
1972[d]	Michigan	20,846	3,223	939	162,205	48,727	3,504
	U.S.	569,928	84,754	27,002	n.a.	1,370,637	92,815
1972[e]	Michigan	24,718	3,446	1,222	186,018	56,080	3,784
	U.S.	683,614	103,237	33,424	5,305,181	1,590,248	112,970
1977[e]	Michigan	24,921	5,882	2,059	218,851	60,550	6,389
	U.S.	725,096	164,219	56,054	6,337,275	1,834,713	179,515

SOURCE: Bureau of the Census, *1977 Census of Service Industries, Geographic Area Series, Michigan* (Washington, D.C.: 1980), SC77-A-23, Table 1 and 2; and similar documents for Michigan for 1972, 1967, 1963, 1958, 1954, and 1947; and for the United States.

a. Excludes establishments with no paid employment and with annual receipts less than $1,000.
b. Week including 15 November for 1947-1963; week including 12 March for 1967 and 1972.
c. Unrevised statistics. Based upon reports from establishments with receipts of $500 or more.
d. Based on 1967 Standard Industrial Classification. Excludes dental laboratories, legal services, and architectural, engineering, and land surveying services which are included in the *Census of Selected Service Industries, 1972*.
e. Based on 1972 Standard Industrial Classification. Includes dental laboratories, legal services, and architectural, engineering, and land surveying services which were excluded in the *Census of Business, 1967, Selected Services*.
n.a.: not available.

XXIV. INTERNATIONAL TRADE

The first Survey of the Origin of Exports by Manufacturing Establishments was organized in response to public and congressional requests for information on the geographic source of manufactured goods sold to customers in other countries. The survey has been repeated at three-year intervals since the first one, for 1960, was completed.

The Bureau of the Census sends copies of the reporting form to more than 20,000 manufacturing establishments with 100 or more employees. Establishments with exports valued at $25,000 or more, f.o.b. plant, are asked to report their exports. These replies are the basis for the geographic allocation of reported export shipments by the manufacturers themselves.

Estimated values of exports, f.o.b. producing plant, for each state or Standard Metropolitan Statistical Area represent the sum of reported exports and exports unknown to the manufacturer; for example, exports handled through a wholesaler. The latter figures are calculated on the basis of the geographical distribution of total manufacturing employment, since there is no survey of middlemen to make that determination.

Other foreign trade statistics are complied by the Bureau of Customs, U.S. Department of Commerce. These figures represent the flow through Michigan and other states.

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TABLE XXIV-1. VALUE OF EXPORT SHIPMENTS BY MANUFACTURING PLANTS IN MICHIGAN AND THE UNITED STATES, BY INDUSTRY GROUP, F.O.B. PRODUCING PLANT: 1972, 1977, 1980, AND 1981

(In millions of dollars)

	Michigan				United States			
Industry group	1972	1977	1980	1981	1972	1977	1980	1981
Food and kindred products	61.1	153.4	153.2	174.0	3,046.2	6,782.2	11,199.6	12,142.2
Apparel, other textile prdcts.	n.a.	78.7	166.4	212.1	n.a.	756.6	1,421.2	1,340.2
Chemicals and allied products	180.3	404.5	512.2	576.9	3,756.8	9,466.1	18,840.5	19,331.5
Paper & allied products	16.8	29.3	31.3	16.4	988.4	2,099.5	4,036.7	4,108.2
Rubber and plastics products	35.3	62.1	77.4	81.0	519.3	1,410.8	2,437.2	2,677.9
Stone, clay, and glass products	48.9	75.9	102.3	99.2	408.7	997.0	1,654.1	1,806.0
Primary metal industries	126.1	196.4	221.4	176.9	1,490.2	2,791.6	7,111.4	6,163.2
Fabricated metal products	312.2	514.3	701.0	837.3	1,429.3	4,125.2	6,229.5	7,057.9
Nonelectrical machinery	464.2	985.5	1,698.4	1,831.6	7,823.6	19,142.1	34,081.0	38,429.8
Electrical equipment and supplies	131.2	188.3	255.2	325.8	3,295.8	8,060.9	14,671.6	16,494.3
Transportation equipment	1,736.1	4,107.1	4,553.1	5,625.4	7,841.7	17,711.9	27,664.6	31,166.1
Instruments and related products	27.8	63.4	152.5	121.5	1,530.9	4,235.1	7,213.0	8,004.4
All other	382.4	78.5	140.1	196.9	4,477.1	8,216.9	14,655.8	15,561.4
TOTAL	3,522.2	6,937.4	8,764.5	10,275.0	36,608.0	85,795.9	151,216.2	164,283.1

SOURCE: Bureau of the Census, Current Industrial Reports, Series MA161, 1972 (Washington, D.C.: periodically), Table 2; and 1977 Census of Manufacturers, Origin of Exports of Manufactured Products (Washington, D.C.: 1981); Bureau of the Census, 1981 Annual Survey of Manufacturers, Origin of Exports of Manufactured Products M81(AS)-5, Table 4a, 4b, 5a, and 5b.

TABLE XXIV-2. FACTORY SHIPMENTS AND EMPLOYMENT RELATED TO MANUFACTURED EXPORTS, BY MAJOR INDUSTRY GROUP, MICHIGAN AND THE UNITED STATES: 1981

Industry group or products	Value of MI mfg. shipments (Millions of dollars)			Percentage[a]		MI mfg. employment (thousands)			Percentage[b]	
	Direct exports	Supporting exports	Total exports	Michigan	United States	Direct exports	Supporting exports	Total exports	Michigan	United States
Food and kindred	174.0	156.5	330.5	4.3	6.4	0.7	0.9	1.6	3.6	5.0
Textile mill	--	--	--	--	10.9	--	--	--	--	10.1
Apparel, other textile	212.1	42.7	254.8	16.4	4.0	2.2	0.5	2.7	15.0	3.1
Lumber and wood	20.2	45.4	65.6	9.6	11.7	0.2	0.8	1.0	8.0	10.0
Furniture and fixtures	62.5	13.4	75.9	4.1	3.0	0.6	0.2	0.8	3.3	2.8
Paper products	16.4	219.2	235.6	8.3	12.5	0.1	1.7	1.8	8.2	11.2
Printing and publishing	29.2	27.6	56.8	2.8	3.0	0.3	0.5	0.8	2.1	2.5
Chemical and allied	576.9	346.0	922.9	17.8	19.9	3.0	2.1	5.1	17.2	18.3
Petroleum and coal	14.3	93.3	107.6	5.6	6.3	(Z)	0.1	0.1	5.2	6.8
Rubber, misc. plastic	81.0	99.7	180.7	11.6	11.4	0.7	1.4	2.1	9.8	10.9
Leather and leather products	--	--	--	6.0	--	--	--	--	--	3.7
Stone, clay, glass	99.2	83.0	182.2	11.5	9.0	1.1	.8	1.9	11.9	8.9
Primary metal	176.9	1,055.3	1,232.2	17.3	19.3	1.7	9.3	11.0	17.5	18.7
Fabricated metal	837.3	919.0	1,756.3	18.1	12.4	9.2	10.5	19.7	17.4	12.2
Machinery, exc.electric	1,831.6	767.4	2,599.0	20.3	23.8	15.4	9.1	24.5	17.2	21.7
Electric, electronic equipment	325.8	104.6	430.4	15.3	16.6	3.9	1.6	5.5	15.7	17.4
Transportation equip.	5,625.4	1,217.7	6,843.1	15.4	18.3	32.3	6.7	39.0	15.9	17.9
Instruments and related	121.5	26.0	147.5	16.8	18.9	1.5	0.4	1.9	14.7	19.3
Misc. mfg. industries	39.0	6.7	45.7	8.3	10.6	0.5	0.1	0.6	5.9	8.9
Admin. & auxiliary	(X)	(X)	(X)	(X)	--	(X)	21.4	21.4	17.1	13.7
Total	10,275.0	5,237.3	15,512.3	14.7	13.4	74.4	68.4	142.8	14.6	12.8

SOURCE: U.S. Department of Commerce, Bureau of the Census, *1981 Annual Survey of Manufactures Origin of Export of of Manufactured Products* 1981 (AS)-5, Tables 5a and 4a.

a. Total export related shipments as a percentage of total manufacturers' shipments.

b. Total export related employment as a percentage of total manufacturing employment.

(Z). Less than one-half of the unit of measurement shown.

(X): not applicable.

TABLE XXIV-3. VALUE OF IMPORTS AND EXPORTS PASSED THROUGH THE DETROIT CUSTOMS DISTRICT AND THE UNITED STATES, VESSEL AND AIR SHIPMENTS AND TOTAL: 1974-1983

(In millions of dollars)

Year	Total		Vessel		Air	
	Detroit	United States	Detroit	United States	Detroit	United States
			General imports			
1974[a]	8,466.1	100,972.3	504.4	67,165.2	87.8	8,921.7
1975[a]	8,205.1	96,104.4	470.2	63,224.3	70.6	8,841.9
1976[a]	10,280.5	120,677.4	705.0	80,758.7	74.7	10,847.0
1977[a]	11,483.1	146,816.7	999.8	100,854.2	72.6	12,491.4
1978	12,728.1	173,249.9	805.4	115,499.0	81.0	17,923.1
1979	13,748.8	207,131.1	881.5	140,924.1	110.2	22,168.7
1980	12,721.6	245,261.9	628.6	165,147.5	136.3	28,044.2
1981	15,334.8	260,981.8	878.9	177,585.6	138.0	29,968.2
1982	16,313.5	243,951.9	687.1	155,929.7	132.7	30,932.5
1983	19,931.9	258,047.8	790.3	156,260.8	129.8	37,784.2
			Exports of domestic and foreign merchandise			
1974[a]	8,707.3	98,507.2	226.9	55,904.8	198.6	13,781.2
1975[a]	9,751.1	107,651.8	249.4	61,801.1	167.5	14,554.6
1976[a]	10,889.1	114,997.2	283.9	64,868.8	184.1	16,905.5
1977[a]	12,115.5	120,163.2	354.2	65,596.5	212.1	19,660.3
1978	13,366.2	143,662.7	578.1	77,530.8	229.7	25,896.7
1979	14,210.1	181,801.6	789.0	97,788.4	171.3	36,660.6
1980	14,633.9	220,704.9	785.1	119,085.8	181.4	45,405.0
1981	17,111.4	233,739.1	601.4	123,771.3	159.1	46,390.9
1982	15,075.8	212,274.6	407.6	116,107.3	142.9	44,584.0
1983	17,865.6	200,537.6	355.0	100,829.7	165.5	45,903.8

SOURCE: Bureau of the Census, Highlights of U.S. Export and Import Trade, (Washington, D.C.: monthly), Tables I-12 and E-4.

a. Transaction value of imports at the foreign port of exportation, including costs to place it alongside the ship, or f.a.s. (free alongside ship) value. For prior years the figures and customs values, which generally represented the value in the foreign country for collection of import duties.

TABLE XXIV-4. WEIGHT OF WATERBORNE IMPORTS AND EXPORTS PASSED THROUGH THE DETROIT CUSTOMS DISTRICT BY PORT: 1979-1983

(Shipping weights in millions of pounds)

Port	Imports					Exports				
	1979	1980	1981	1982	1983^{p}	1979	1980	1981	1982	1983^{p}
Detroit	5,567	2,491	4,755	2,541	3,290	1,422	1,337	777	1,241	998
Port Huron	952	641	416	372	111	751	707	522	93	66
Sault Ste. Marie	42	3	27	100	166	439	505	326	210	166
Saginaw-Bay City	540	640	611	627	717	962	693	589	422	158
Muskegon	39	158	36	145	21	0	0	0	0	48
Grand Haven	69	159	46	94	106	0	0	0	0	38
Rogers City	0	48	47	57	0	2,425	2,038	2,608	1,934	2,109
Detour	0	0	0	45	0	1,176	583	659	269	346
Escanaba	2	3	0	0	4	689	176	0	90	125
Marquette	n.a.	5	0	0	0	0	0	804	0	3,361
Presque Isle	0	0	57	175	80	4,447	7,482	5,595	2,605	950
Alpena	45	32	0	84	57	3,523	1,779	2,007	993	1,511
Ferrysburg	119	38	119	0	119	0	0	0	0	536
TOTAL	7,378	4,218	6,115	4,409	4,690	15,833	15,319	13,387	7,856	10,413

SOURCE: Bureau of the Census, Waterborne Exports and General Imports, (Washington, D.C.: monthly and annually), Tables I-1 and E-1.

XXV. OTHER ENTERPRISE STATISTICS

This chapter includes material that cannot easily be categorized within the other chapters relating to business in Michigan. Statistics on patents and on research and development activities of business are collected and published by various agencies of the federal government.

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TABLE XXV-1. NUMBER, BUSINESS RECEIPTS, PAYROLLS, DEPRECIATION, AND NET PROFITS OF NONFARM PROPRIETORSHIPS IN MICHIGAN AND THE UNITED STATES: 1966-1981

		Thousands of dollars			
Year	Number	Business receipts	Payrolls	Depreciation	Net profit
			Michigan		
1966	215,769	7,632,329	865,609	193,124	1,160,758
1967	214,644	8,221,935	996,612	191,016	1,264,783
1968	219,172	8,203,156	1,038,499	209,713	1,318,421
1969	229,493	8,261,634	1,007,738	n.a.	1,325,899
1970	221,780	7,953,693	939,301	n.a.	1,232,920
1971	241,718	8,245,805	955,840	n.a.	1,240,018
1972	246,562	8,748,695	1,018,386	239,825	1,372,904
1973	257,408	9,362,591	1,114,025	274,870	1,542,548
1974	261,798	9,893,119	1,076,543	288,916	1,458,146
1975	264,716	9,892,274	1,090,173	303,934	1,418,023
1976	275,597	10,392,873	1,087,828	317,160	1,503,054
1977	280,050	11,423,835	1,187,609	n.a.	1,738,164
1978	287,457	12,311,968	1,289,306	n.a.	1,917,956
1978[a]	358,584	13,497,783	1,382,261	n.a.	1,931,675
1979[a]	391,562	14,576,572	1,398,430	722,638	1,904,486
1980[a]	398,585	15,875,127	1,273,803	723,459	1,840,114
1981	316,298	13,666,018	n.a.	206,109	1,592,149
			United States		
1966	5,901,571	171,643,054	19,653,340	4,481,983	25,504,318
1967	5,925,935	175,660,827	20,138,994	4,677,045	26,621,637
1968	5,998,610	184,617,439	21,229,554	4,779,256	28,299,606
1969	6,155,374	193,894,487	22,364,904	n.a.	29,739,427
1970	6,313,259	195,792,289	22,362,930	n.a.	30,022,920
1971	6,612,225	211,193,510	23,513,831	n.a.	31,516,479
1972	6,957,436	224,128,730	24,466,884	6,071,144	33,911,098
1973	7,445,153	248,785,404	26,924,663	6,862,388	38,058,018
1974	7,688,795	264,802,830	27,391,496	7,470,131	38,980,898
1975	7,759,576	273,954,741	29,018,942	7,958,143	39,636,453
1976	8,139,962	301,446,844	31,494,376	8,536,390	44,424,787
1977	8,413,806	324,492,975	32,533,568	9,541,552	49,436,518
1978	8,908,289	361,630,253	36,605,195	10,998,879	53,481,341
1978[a]	12,017,953	443,354,851	40,576,849	21,206,674	59,027,286
1979[a]	12,329,982	487,807,384	42,366,149	24,170,602	60,758,789
1980[a]	12,701,597	505,884,882	41,985,964	25,796,183	55,449,987
1981	9,584,790	427,063,055	n.a.	15,854,513	53,071,628

SOURCE: Internal Revenue Service, Statistics of Income, Business Income Tax Returns, Sole Proprietorships and Partnerships, (Washington, D.C.: annually), Table 4 and 12.

[a] Includes agriculture. State data on nonfarm proprietorships no longer are listed as a separate item.

n.a.: not available.

TABLE XXV-2. NUMBER, BUSINESS RECEIPTS, PAYROLLS, DEPRECIATION, AND NET PROFITS OF PARTNERSHIPS IN MICHIGAN AND THE UNITED STATES: 1966-1980

		Thousands of dollars			
Year	Number	Business receipts	Payrolls	Depreciation	Net profit
			Michigan		
1966	31,662	2,953,941	380,274	98,563	402,722
1967	30,935	2,953,666	411,458	95,772	419,930
1968	31,721	3,065,198	410,656	111,077	447,845
1969	31,374	3,204,384	411,487	n.a.	396,754
1970	31,859	2,802,157	354,031	n.a.	252,589
1971	n.a.	n.a.	n.a.	n.a.	n.a.
1972	33,413	3,269,015	370,382	192,886	273,833
1973	34,408	3,856,285	455,088	241,160	298,961
1974	36,592	4,302,715	490,288	266,340	249,977
1975	35,537	4,289,002	476,074	324,096	253,272
1976	36,013	4,285,667	459,319	326,919	257,583
1977	37,959	4,702,704	497,388	n.a.	363,565
1978	40,252	5,921,623	625,154	n.a.	425,555
1978[a]	42,042	6,211,342	646,204	n.a.	460,884
1979[a]	42,590	6,978,504	727,995	587,193	589,339
1980[a]	46,571	6,979,474	627,592	695,580	475,967
			United States		
1966	796,116	72,808,301	9,805,683	2,361,243	9,656,194
1967	780,885	72,515,107	10,169,459	2,599,921	10,216,025
1968	795,495	75,213,174	10,617,664	2,903,298	10,756,354
1969	800,391	80,009,120	11,148,745	n.a.	9,788,097
1970	811,845	82,982,213	11,558,441	n.a.	9,122,597
1971	n.a.	n.a.	n.a.	n.a.	n.a.
1972	876,150	95,435,014	12,587,899	5,296,742	8,889,094
1973	915,994	109,476,011	13,595,004	6,382,308	7,929,218
1974	952,175	125,780,194	14,961,016	7,785,440	7,973,323
1975	964,052	134,511,262	16,179,238	9,197,292	7,000,900
1976	974,763	144,822,904	17,840,359	9,889,016	9,450,489
1977	1,048,676	164,926,675	19,041,205	11,296,382	12,867,895
1978	1,125,776	197,114,117	21,241,964	13,281,912	13,347,071
1978[a]	1,234,799	214,912,044	22,272,361	14,519,760	14,418,042
1979[a]	1,299,593	253,000,742	26,092,084	17,662,667	15,205,908
1980[a]	1,379,654	285,967,243	29,332,070	21,576,190	8,248,656

SOURCE: Internal Revenue Service, Tax Returns, (Washington, D.C.: annually), Table 2.4.

a. Includes agriculture. State data on nonfarm proprietors no longer are listed as a seperate item.

n.a.: not available.

TABLE XXV-3. NUMBER OF FRANCHISE ESTABLISHMENTS IN MICHIGAN AND THE UNITED STATES, BY TYPE OF BUSINESS: 1980 AND 1982 (cont.)

Kind of business	Year	Michigan Company owned	 Franchisee owned	 Total	United States Company owned	 Franchisee owned	 Total
Rental services	1980	1	46	47	176	1,496	1,672
equipment	1982	0	33	35	200	1,680	1,880
Restaurants	1980	766	1,680	2,446	16,082	38,993	55,075
	1982	799	1,719	2,498	18,740	40,919	59,659
Retailing -	1980	291	486	777	10,179	19,648	29,827
nonfood	1982	360	516	876	10,164	19,787	29,951
Retailing - food							
& other convenience	1980	57	240	297	924	11,012	11,936
stores	1982	100	275	375	1,735	11,318	13,053

SOURCE: U. S. Department of Commerce, Industry and Trade Administration, Franchizing in the Economy 1980-1982 and 1982-1984, (Washington, D.C.).

TABLE XXV-4. EXPENDITURES FOR INDUSTRIAL RESEARCH AND DEVELOPMENT IN MICHIGAN AND THE UNITED STATES, BY SOURCE OF FUNDING: 1963-1977, 1979 AND 1981

Date	Federal funds		Mich. as a	Company funds		Mich. as a
	Michigan	United States	% of U.S.	Michigan	United States	% of U.S.
1963	65	7,270	.89	797	5,360	14.87
1964	65	7,600	.85	835	5,753	14.51
1965	67	7,740	.86	895	6,445	13.89
1966	98	8,287	1.18	977	7,254	13.47
1967	115	8,388	1.39	952	8,032	11.85
1968	98	8,559	1.14	1,086	8,876	12.23
1969	83	8,619	.96	1,228	9,856	12.46
1970	77	7,785	.99	1,171	10,073	11.62
1971	78	7,671	1.02	1,338	10,643	12.57
1972	86	8,090	1.06	1,500	11,347	13.22
1973	56	8,222	.68	1,832	12,699	14.43
1974	78	8,332	.94	1,990	14,038	14.18
1975	114	8,765	1.30	1,858	14,776	12.57
1976	124	9,285	1.33	2,248	17,391	12.93
1977	144	10,545	1.37	2,614	19,362	13.50
1979	n.a.	12,460	n.a.	3,589[a]	25,493	n.a.
1981	n.a.	16,468	n.a.	4,272[a]	35,362	n.a.

SOURCE: National Science Foundation, Research and Development in Industry, 1966 through 1975 (Washington, D.C.: annually), NS76-322, Table B-23 (1977), and National Science Foundation, Basic Research, Applied Research, and Development in Industry, 1964 (Washington, D.C.: 1966), NS66-28, Table 26; and special release.

NOTE: The bulk of expenditures for industrial research and development are for development and made by manufacturing industries.

a. Includes federal funds.

n.a.: Not available.

TABLE XXV-5. NEW INCORPORATIONS IN MICHIGAN: 1968-1983

Year	Profit	Nonprofit	Foreign (out of state)	Total
1968	7,700	1,588	825	10,113
1969	9,586	1,767	1,064	12,417
1970	8,378	1,782	1,054	11,214
1971	8,270	1,993	1,082	11,345
1972	9,202	2,134	1,175	12,511
1973	9,709	1,878	1,093	12,680
1974	9,342	2,106	1,009	12,457
1975	9,996	2,138	926	13,060
1976	11,545	2,080	972	14,597
1977	13,273	2,082	956	16,311
1978	14,538	2,148	1,039	17,725
1979	18,654	2,217	1,062	21,933
1980	16,931	2,503	1,077	20,511
1981	17,139	2,288	1,277	20,704
1982	17,201	2,294	1,300	20,795
1983	18,463	2,613	1,540	22,616

SOURCE: Michigan Department of Management and Budget, Economic Report of the Governor, 1982 (Lansing: 1982), Table C-18, and Michigan Department of Commerce, special release.

TABLE XXV-6. U.S. PATENTS ISSUED TO RESIDENTS OF MICHIGAN AND THE UNITED STATES: 1966-1983

Year	Michigan	United States	Year	Michigan	United States
1966	3,675	57,700	1975	2,832	49,494
1967	3,306	54,191	1976	2,691	51,808
1968	2,968	48,804	T.Q.	621	11,368
1969	3,160	53,422	1977	2,474	47,292
1970	2,831	49,821	1978	2,373	44,482
1971	3,386	58,693	1979	1,875	34,383
1972	3,156	54,093	1980	2,130	38,134
1973	3,091	54,690	1981	2,457	43,194
1974	3,215	57,812	1982	1,741	33,896
			1983	1,678	32,872

SOURCE: Patent and Trademark Office, Commissioner of Patents and Trademarks, Annual Report, Fiscal Year: 1981 (Washington, D.C.: 1982), Table 13, and special release.

NOTE: 1966-1973 are calendar years and do not include reissues; 1974-1975 are fiscal years and include reissues. T..Q. = transitionary quarter, 1 July 1976 - 30 September 1976.

TABLE XXV-7. NUMBER OF SMALL BUSINESSES IN MICHIGAN BY COUNTY: 1972 AND 1977

County	1972	1977	County	1972	1977
Alcona	185	243	Lake	162	203
Alger	217	289	Lapeer	770	1,041
Allegan	1,276	1,469	Leelanau	283	421
Alpena	716	918	Lenawee	1,760	1,926
Antrim	325	472	Livingston	990	1,498
Arenac	292	360	Luce	153	193
Baraga	193	235	Mackinac	349	435
Barry	656	667	Monroe	8,514	12,523
Bay	2,149	2,336	Manistee	520	614
Benzie	272	359	Marquette	1,069	1,395
Berrien	3,393	3,883	Mason	532	620
Branch	736	886	Mecosta	504	678
Calhoun	2,676	2,744	Menominee	551	615
Cass	679	770	Midland	975	1,283
Charlevoix	456	624	Missaukee	173	205
Cheboygan	501	725	Monroe	1,682	1,859
Chippewa	725	836	Montcalm	863	958
Clare	454	599	Montmorency	196	261
Clinton	749	927	Muskegon	2,607	2,881
Crawford	201	269	Newaygo	564	602
Delta	833	968	Oakland	17,247	26,765
Dickinson	641	740	Oceana	377	478
Eaton	1,142	1,463	Ogemaw	332	449
Emmet	641	894	Ontonagon	233	273
Genesee	6,492	7,398	Osceola	345	439
Gladwin	274	367	Oscoda	154	186
Gogebic	517	575	Otsego	345	544
Grand Traverse	1,169	1,770	Ottawa	2,262	3,024
Gratiot	825	874	Presque Isle	298	350
Hillsdale	796	839	Roscommon	522	661
Houghton	722	845	Saginaw	3,552	4,201
Huron	855	1,063	St. Clair	2,287	2,555
Ingham	4,507	5,311	St. Joseph	1,114	1,218
Ionia	857	911	Sanilac	809	971
Iosco	611	762	Schoolcraft	251	295
Iron	386	462	Shiawassee	1,135	1,248
Isabella	720	904	Tuscola	886	1,094
Jackson	2,695	2,870	Van Buren	1,069	1,261
Kalamazoo	3,591	4,444	Washtenaw	4,033	5,368
Kalkaska	150	247	Wayne	41,605	36,889
Kent	8,175	9,548	Wexford	501	698
Keweenaw	61	71	MICHIGAN	157,439	182,115

SOURCE: Bureau of the Census, 1977 Census of Selected Service Industries, Geographic Area Series, Michigan, (Washington, D.C.: 1979), SC77-A-23, Table 5; 1977 Census of Retail Trade, Area Series, Michigan (Washington, D.C.: 1979), RC77-A-23, Table 7; and similar documents for 1972.

Note: Small businesses is here defined as establishments in the private sector with 1-19 employees, and partnerships and proprietorships with no employees.

APPENDIX

The concept of the "standard metropolitan statistical area" has been developed to meet the need for the presentation of statistics. The following excerpts from the U.S. Census of Population: 1960 and U.S. Census of Population: 1970 describe the purpose of the SMSAs.

"It has long been recognized that for many types of social and economic analysis it is necessary to consider as a unit the entire population in and around the city whose activities form an integrated social and economic system.... To permit all Federal statistical agencies to utilize the same areas for the publication of general-purpose statistics, the Office of Management and Budget has established 'standard metropolitan statistical areas' (SMSAs)."

"Except in New England, an SMSA is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more or 'twin cities' with a combined population of at least 50,000. In addition to the county, or counties, containing such a city or cities, contiguous counties are included in an SMSA if, according to a certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city."

"The Bureau of the Census recognizes 243 Standard Metropolitan Statistical Areas (SMSAs) in the United States and four in Puerto Rico, making a total of 247 in the 1970 census. These include the 231 SMSAs as defined and named in the Bureau of the Budget publication, Standard Metropolitan Statistical Areas: 1967, U.S. Government Printing Office, Washington, D.C. 20402. Since 1967, 16 SMSAs have been added, of which two were defined in January 1968 and an additional 14 were defined in February 1971 on the basis of the 1970 census.

Users of this statistical abstract will find that certain tables pertain to areas in Michigan which are SMSAs.

Michigan's Standard Metropolitan Statistical Areas for 1940, 1950, 1967, 1971, and 1973 were composed as follows:

MICHIGAN SMSAs, COUNTIES INCLUDED

SMSA	1940[a]	1950	1967	1971	1973
Ann Arbor-Ypsilanti			Washtenaw	Washtenaw	Washtenaw
Battle Creek				Calhoun	Calhoun Barry
Bay City[b]		Bay	Bay	Bay	Bay
Detroit	Macomb Oakland Wayne	Macomb Oakland Wayne	Macomb Oakland Wayne	Macomb Oakland Wayne	Lapeer Livingston Macomb Oakland St. Clair Wayne
Flint	Genesee	Genesee	Genesee	Genesee Lapeer	Genesee Shiawassee
Grand Rapids	Kent	Kent	Kent	Kent Ottawa	Kent Ottawa
Jackson		Jackson	Jackson	Jackson	Jackson
Kalamazoo-Portage	Kalamazoo	Kalamazoo	Kalamazoo	Kalamazoo	Kalamazoo Van Buren
Lansing-East Lansing	Ingham	Ingham	Ingham Clinton Eaton	Ingham Clinton Eaton	Ingham Ionia Clinton Eaton
Muskegon-Norton Shores-Muskegon Heights			Muskegon	Muskegon	Muskegon
Saginaw[b]	Saginaw	Saginaw	Saginaw	Saginaw	Saginaw

SOURCE: U.S. Bureau of the Census, *U.S. Census of Population: 1950, 1960 and 1970*; Bureau of the Budget, *Metropolitan Statistical Areas*.

NOTE: Because of changes in desgination of individual areas from Metropolitan Areas in 1940 to Standard Metropolitan Areas (SMSAs) for the 1950 census, to Standard Metropolitan Statistical Areas for the 1960 census, and changes in the SMSAs since 1960, the census data presented by SMSAs are not comparable.

a. The designation was changed from Metropolitan Area to Standard Metropolitan Area just prior to the 1950 census. It finally was standardized as Standard Metropolitan Statistical Area in 1959.

b. Saginaw and Bay City were classified in the 1940 census as the Metropolitan Area of Saginaw-Bay City which was composed of Bay and Saginaw counties.

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Kind of business	Year	Michigan			United States		
		Company owned	Franchisee owned	Total	Company owned	Franchisee owned	Total
Accounting, credit, collection agencies and general business systems	1980	0	62	62	36	1,953	1,989
	1982	0	81	81	33	2,005	2,038
Construction, home improvement, maintenance, & cleaning services	1980	29	355	384	438	10,180	10,618
	1982	31	335	366	568	12,039	12,607
Convenience stores	1980	78	134	212	9,661	5,202	14,863
	1982	194	134	328	9,337	4,457	13,794
Educational products and services	1980	31	22	53	500	1,928	2,428
	1982	39	18	57	544	1,482	2,026
Employment services	1980	31	98	129	1,114	2,957	4,071
	1982	31	113	144	1,292	2,747	4,039
Hotels, motels and campgrounds	1980	25	130	155	964	5,444	6,408
	1982	22	113	135	957	4,867	5,824
Laundry & dry cleaning services	1980	0	122	122	45	2,855	2,900
	1982	0	126	126	83	2,860	2,943
Printing & copying services	1980	1	147	148	131	2,660	2,791
	1982	1	168	169	112	3,290	3,402
Real estate	1980	46	890	936	192	16,740	16,932
	1982	56	769	825	171	13,910	14,081
Recreation, entertainment & travel	1980	0	48	48	94	2,038	2,132
	1982	0	53	53	117	2,309	2,426
Rental services - auto and truck	1980	50	137	187	1,512	4,681	6,193
	1982	44	104	148	1,591	4,323	5,914

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